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# **NAVAL POSTGRADUATE SCHOOL**

**MONTEREY, CALIFORNIA**

## **THESIS**

**STRENGTHENING HOMELAND SECURITY THROUGH  
IMPROVED FOREIGN LANGUAGE CAPABILITY**

by

Sean C. Stevens

December 2011

Thesis Advisor:

Second Reader:

Erik Dahl

Maiah Jaskoski

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<b>REPORT DOCUMENTATION PAGE</b>			<i>Form Approved OMB No. 0704-0188</i>	
Public reporting burden for this collection of information is estimated to average 1 hour per response, including the time for reviewing instruction, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information. Send comments regarding this burden estimate or any other aspect of this collection of information, including suggestions for reducing this burden, to Washington headquarters Services, Directorate for Information Operations and Reports, 1215 Jefferson Davis Highway, Suite 1204, Arlington, VA 22202-4302, and to the Office of Management and Budget, Paperwork Reduction Project (0704-0188) Washington DC 20503.				
<b>1. AGENCY USE ONLY (Leave blank)</b>		<b>2. REPORT DATE</b> December 2011	<b>3. REPORT TYPE AND DATES COVERED</b> Master's Thesis	
<b>4. TITLE AND SUBTITLE</b> Strengthening Homeland Security through Improved Foreign Language Capability			<b>5. FUNDING NUMBERS</b>	
<b>6. AUTHOR(S)</b> Sean C. Stevens				
<b>7. PERFORMING ORGANIZATION NAME(S) AND ADDRESS(ES)</b> Naval Postgraduate School Monterey, CA 93943-5000			<b>8. PERFORMING ORGANIZATION REPORT NUMBER</b>	
<b>9. SPONSORING /MONITORING AGENCY NAME(S) AND ADDRESS(ES)</b> N/A			<b>10. SPONSORING/MONITORING AGENCY REPORT NUMBER</b>	
<b>11. SUPPLEMENTARY NOTES</b> The views expressed in this thesis are those of the author and do not reflect the official policy or position of the Department of Defense or the U.S. Government. IRB Protocol number NPS20110095-IR-EP7-A.				
<b>12a. DISTRIBUTION / AVAILABILITY STATEMENT</b> Approved for public release; distribution is unlimited			<b>12b. DISTRIBUTION CODE</b>	
<b>13. ABSTRACT (maximum 200 words)</b> <p>In this thesis, I examine the best ways to meet post-9/11 language requirements for homeland defense and security. I look at language programs at the Federal Bureau of Investigation (FBI), the Department of State, the Department of Homeland Security (DHS), the New York Police Department (NYPD), and a federally sponsored initiative called the Language Flagship. I then examine how trained linguists reach native-like proficiency, drawing on existing studies and original research of the interpreter program at the Defense Threat Reduction Agency (DTRA). Analysis reveals that motivation, time-on-task, and immersion are the most important individual factors in attaining high-level foreign-language proficiency. In addition, organizations which utilize native or heritage speakers, conduct proficiency testing, offer language-related incentives (not to include proficiency pay), and offer regular exposure to foreign language at work, are most successful. While these factors are necessary for an organization's success, they alone are not sufficient. DTRA, NYPD, and FBI's Language Analyst programs successfully utilize foreign language capability for homeland defense and security, although each accomplishes this goal in vastly different ways. This thesis argues that expanded use of native and heritage speakers, more regular and high-level training, and expanded use of immersion, would lead to improved foreign language capability.</p>				
<b>14. SUBJECT TERMS</b> Homeland defense, homeland security, defense, security, linguist, linguists, interpreter, interpreters, foreign languages, foreign languages, FBI, DHS, DOS, DTRA, CASL, CDLC, Language Flagship, NSEP, national security education program, Boren scholarship, Middlebury, middlebury, immersion, language, isolation-immersion, OS, OSI, on-site inspection, language training, NPS, naval postgraduate school.			<b>15. NUMBER OF PAGES</b> 132	
			<b>16. PRICE CODE</b>	
<b>17. SECURITY CLASSIFICATION OF REPORT</b> Unclassified	<b>18. SECURITY CLASSIFICATION OF THIS PAGE</b> Unclassified	<b>19. SECURITY CLASSIFICATION OF ABSTRACT</b> Unclassified	<b>20. LIMITATION OF ABSTRACT</b> UU	

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**STRENGTHENING HOMELAND SECURITY THROUGH IMPROVED  
FOREIGN LANGUAGE CAPABILITY**

Sean C. Stevens  
Lieutenant Commander, United States Navy  
B.S., Georgetown University, 2001

Submitted in partial fulfillment of the  
requirements for the degree of

**MASTER OF ARTS IN SECURITY STUDIES  
(HOMELAND SECURITY)**

from the

**NAVAL POSTGRADUATE SCHOOL  
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## **ABSTRACT**

In this thesis, I examine the best ways to meet post-9/11 language requirements for homeland defense and security. I look at language programs at the Federal Bureau of Investigation (FBI), the Department of State, the Department of Homeland Security (DHS), the New York Police Department (NYPD), and a federally sponsored initiative called the Language Flagship. I then examine how trained linguists reach native-like proficiency, drawing on existing studies and original research of the interpreter program at the Defense Threat Reduction Agency (DTRA). Analysis reveals that motivation, time-on-task, and immersion are the most important individual factors in attaining high-level foreign-language proficiency. In addition, organizations which utilize native or heritage speakers, conduct proficiency testing, offer language-related incentives (not to include proficiency pay), and offer regular exposure to foreign language at work, are most successful. While these factors are necessary for an organization's success, they alone are not sufficient. DTRA, NYPD, and FBI's Language Analyst programs successfully utilize foreign language capability for homeland defense and security, although each accomplishes this goal in vastly different ways. This thesis argues that expanded use of native and heritage speakers, more regular and high-level training, and expanded use of immersion, would lead to improved foreign language capability.



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## **LIST OF ACRONYMS AND ABBREVIATIONS**

ACTFL	American Council of Teachers of Foreign Language
CASL	Center for Advanced Study of Language
CBP	Customs and Border Protection
CFE	Conventional Armed Forces in Europe Treaty
CDLC	Coalition of Distinguished Language Centers
CIA	Central Intelligence Agency
CTI	Cryptologic Technician Interpretive
DLAB	Defense Language Aptitude Battery
DLI	Defense Language Institute
DLPT	Defense Language Proficiency Test
DHS	Department of Homeland Security
DoD	Department of Defense
DTRA	Defense Threat Reduction Agency
ERO	Enforcement and Removal Operations
FBI	Federal Bureau of Investigation
FLETC	Federal Law Enforcement Training Center
FSI	Foreign Service Institute
GAO	Government Accountability Office
GWOT	Global War on Terror
HI-LAB	High-level Language Aptitude Battery
HSI – Intel	ICE Homeland Security Investigations Intelligence Office
IA	ICE International Affairs Office
ICE	Immigrations and Customs Enforcement
ICE – HSI	ICE Homeland Security Investigations Directorate
ILR	Interagency Language Roundtable
INS	Immigration and Naturalization Service
MLAT	Modern Language Aptitude Test
New START	New Strategic Arms Reduction Treaty
NST	New Strategic Arms Reduction Treaty
NYPD	New York Police Department
OS	On-Site Directorate of Defense Threat Reduction Agency
OSI	On-Site Inspection Agency
RACSPC	Russian Arms Control Speaking Proficiency Course
SIGINT	Signals Intelligence



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## EXECUTIVE SUMMARY

What is the best way to meet post-9/11 language requirements for homeland defense and security? In this thesis, I answer this question. I examine efforts to meet post-9/11 language requirements at a number of agencies, including the Federal Bureau of Investigation (FBI), the Department of State, the Department of Homeland Security (DHS), the New York Police Department (NYPD), and a federally sponsored language program called the Language Flagship. A comparison of these agencies reveals the advantages and disadvantages of recruiting native, heritage, or trained linguists, versus training personnel to speak foreign languages. I then examine how trained linguists reach native-like proficiency, drawing on existing studies and original research on the interpreter program at the Defense Threat Reduction Agency (DTRA). Finally, I offer conclusions on how best to “build”<sup>1</sup> linguists with language proficiency adequate to meet the demands of homeland defense and security.

This thesis argues that high-level language achievement is only possible through motivation, time-on-task, and immersion, and organizations that have the most successful foreign language programs employ native or heritage speakers, offer language-related incentives (not necessarily to include proficiency pay), utilize proficiency testing, and regularly expose employees to foreign language at work. Thesis research reveals that among the compared language programs, DTRA, FBI’s Language Analyst program, and NYPD all exhibited these four practices. Combining best practices in linguist development and best organizational practices, the most successful organizations provide linguists a solid foundation of knowledge (when necessary), place them in jobs which requiring the regular use of language, provide recurrent training, and give linguists regular exposure to high-level language.

In this thesis, I develop a simplified model for linguist development<sup>2</sup> that aids in conceptualizing how to develop foreign language capability for homeland defense and

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<sup>1</sup> See Chapter I for citation information.

<sup>2</sup> See Chapter V for citation information.

security needs. First, a linguist begins with a foundation of knowledge, whether gained through an intensive course, university study, or heritage experience, which brings the linguist to roughly ILR Level 2.<sup>3</sup> Next, the linguist enters either a structured study-abroad program or has immersion or limited work experiences abroad, bringing her to ILR level 3.<sup>4</sup> Finally, the linguist either participates in matriculated study or immersed work experience abroad, or directed study to refine and solidify linguistic gains, bringing her to ILR Level 4.

Level of Language Achievement	Critical Factors in Development	
	ILR LEVEL 0 – 2 <b>FOUNDATION</b>	Heritage Experience Intensive Courses College Experience
	ILR LEVEL 2 – 3 <b>IMMERSION</b>	Living Abroad Study Abroad Limited Work Abroad
	ILR LEVEL 3 – 4 <b>UTILIZATION</b>	Direct University Matriculation Abroad Work Abroad Directed Study for Language Refinement

#### A Simplified Model of Linguist Development

Much of the debate regarding foreign language capability in the federal government post-9/11 has focused on a lack of foreign language capacity in “critical” languages, such as Arabic, Persian-Farsi, and Chinese. This thesis shows that in terms of homeland defense and security related missions, the deficiency extends to “traditional”

<sup>3</sup> See Appendix for a description of the different levels of proficiency.

<sup>4</sup> See Chapter V for citation information.

languages, such as Spanish. Furthermore, for homeland defense and security purposes, consistent Spanish-language proficiency would considerably improve border security.

In terms of critical languages, the Department of State is still not meeting language goals, especially in middle-eastern languages such as Arabic, and available evidence suggests that the FBI has likewise failed to fill its Special Agent ranks with linguists proficient in such languages. While the federal government should continue to develop its capability in critical languages, the nature of homeland defense and security related missions requires that it must just as urgently improve its Spanish language capability. Thesis research suggests that an ILR 0+ to 1 increase across-the-board is needed for law enforcement, intelligence, and interpretation needs in all languages.

This thesis identified two models which have successfully developed high-proficiency linguists: DTRA and the Department of State, through its Foreign Service Institute. It is unlikely that other agencies will have the resources necessary to replicate these models, however. Instead, NYPD's success shows a more cost-effective method of utilizing foreign language capability. By capitalizing on existing heritage and native-speaking staff, NYPD has developed a very effective language program, and CBP has experienced similar success. FBI's Language Analyst program has improved by recruiting professional-level interpreters.

Drawing from all successful programs, there are simple changes that organizations can make which reflect best practices in language training. Teaming heritage and native speakers with trained linguists, mandating weekly refresher training, and placing linguists in positions which require the regular use of foreign language, are all practices which aid in high-level achievement. In addition, fostering a work environment that values language capability is vital to motivate linguists to continue to work towards the "above and beyond."

Finally, this thesis shows strong correlation between immersion and improvement in speaking proficiency. Given the demand for competent speakers in the post-9/11 world, the efficacy of mandating immersion during training and work evolutions should be researched further.

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## ACKNOWLEDGMENTS

This thesis would not have been possible without Dr. Betty Lou Leaver and Dr. Catherine Doughty's guidance. Dr. Betty Lou Leaver, Assistant Provost for Continuing Education at the Defense Language Institute Foreign Language Center, introduced me to current research being conducted in high-proficiency language acquisition. Dr. Catherine Doughty, Area Director, Second Language Acquisition at the University of Maryland's Center for Advanced Study of Language, provided guidance on current research methodology, and served as a mentor and sounding-board throughout my research. Special thanks also go to Dr. John Lett, Dean, Research and Analysis at the Defense Language Institute Foreign Language Center, for helping with hypothesis-development at the very outset of my research.

To Dr. Erik Dahl, Assistant Professor at the Naval Postgraduate School, my thesis advisor, mentor, and friend, thanks so much for your sage advice, patience, and "tough-love" when necessary. I know that I like to talk, and you are always there to listen. Thanks also to my second reader, Dr. Maiah Jaskoski, Assistant Professor at the Naval Postgraduate School, for understanding my passion for foreign languages, and helping me transform it into a coherent thesis.

The thesis research also would not have been possible without the selfless support of the Defense Threat Reduction Agency's On-Site Directorate. To Lieutenant Colonel Kelly Easler, USAF, Chief of the Language Training Branch, thank you for helping me share a uniquely successful foreign language program with an outside audience. To Ms. Valentina Freeman, Chairperson, Russian Arms Control Speaking Proficiency Course, thank you for allowing me to visit classes and see first-hand what training future interpreters undertake. In addition, I want to personally thank the 17 DTRA interpreters who participated in my research. Your remarkable foreign language proficiency is proof that high-level foreign language proficiency is possible throughout the U.S. government.

Finally, I would like to thank my wife, Mrs. Elizabeth Stevens, Esq., for editing my thesis. Any obscene use of passive voice, runaway use of “this,” or bizarre sentence structures in this thesis are my fault, alone, Lizza.

# I. INTRODUCTION

## A. PREFACE

In the fall of 1804, Lewis and Clark enlisted Sacagawea as expedition interpreter on their epic voyage up the Missouri river.<sup>5</sup> In doing so, they set a precedent for U.S. government use of linguists<sup>6</sup> for homeland defense and security purposes. Sacagawea spoke both Hidatsa and Shoshone, and Lewis and Clark knew that they would soon be traveling through Shoshone lands. After a close call with the Sioux, they recognized the necessity of having an expedition member who could fluently communicate with the locals; other members of the expedition could speak a few words or phrases, but they had proven incapable of explaining the expedition's peaceful intent, with almost disastrous results.<sup>7</sup> In Sacagawea, a captured member of the Shoshone Nation, Lewis and Clark found someone who could not only interpret, but who could also understand the culture, and who was more likely to be accepted by indigenous peoples.<sup>8</sup>

At the beginning of the 19th century, knowledge of the American Indian languages was confined to those who lived among or traded with Native Americans. Before enlisting the help of Sacagawea, Lewis and Clark had signed on numerous half-native members to the expedition who spoke a number of Native American languages.<sup>9</sup>

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<sup>5</sup> Stephen E. Ambrose, *Undaunted Courage* (New York: Touchstone, 1996), 187.

<sup>6</sup> For the purposes of this thesis, "linguist" means "a person accomplished in languages; especially: one who speaks several languages." See Merriam-Webster Online, s.v. "linguist," accessed 16 MAY 11, <http://www.merriam-webster.com/dictionary/linguist>.

<sup>7</sup> Ambrose, *Undaunted Courage*, 169.

<sup>8</sup> Ambrose, *Undaunted Courage*, 187.

<sup>9</sup> Ambrose, *Undaunted Courage*, 138.



At the time, they had no choice but to rely on native or heritage<sup>10</sup> speakers to interpret, as there were no schools which taught these “critical”<sup>11</sup> languages.

Similarly, native and heritage speakers were used at Ellis Island through the turn of the twentieth century, although these same interpreters soon picked up critical words and phrases in a number of different foreign languages.<sup>12</sup> It became common for interpreters to speak a half-dozen languages, with one setting the record at 15!<sup>13</sup> Beginning in World War II and throughout the Cold War, the United States government developed a capability to train its personnel in much-needed critical languages, such as Russian. Since 9/11, it has attempted to shift its capability to those languages relevant to the War on Terror. But the level of proficiency, number of linguists, and pool of languages available have proven insufficient to meet homeland defense and security requirements. In response, the United States government has, as Lewis and Clark did, largely chosen to hire more native or heritage speakers. But unlike with Lewis and Clark’s historic expedition, native and heritage speakers alone are insufficient to meet modern demands.<sup>14</sup>

## **B. MAJOR RESEARCH QUESTION**

What is the best way to meet post-9/11 language requirements for homeland defense and security? In this thesis, I answer this question. I examine efforts to meet post-9/11 language requirements at a number of agencies, including the Federal Bureau

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<sup>10</sup> A person who is raised in a language other than English because of ethnic or cultural attachment and often has no formal education in said language, usually resulting in an unbalanced capability to speak or interpret. An example would be an American born to ethnic Russian parents who speaks Russian at home but is educated in English.

<sup>11</sup> Languages that are important for national security purposes that are not being studied sufficiently by U.S. graduate students (50 U.S.C. 1903(d)(4)(B)). Commonly refers to languages such as Arabic, Persian, Pashto, etc., for which demand for national security purposes far outstrips supply.

<sup>12</sup> Dick Eastman, “The Myth of Ellis Island Name Changes,” Ancestry.com, entry posted May 16, 2001, <http://www.ancestry.com/learn/library/article.aspx?article=3893> (accessed 28 MAY 11).

<sup>13</sup> Dick Eastman, “Ellis Island and Your Ancestors,” Eastman’s Online Genealogy Newsletter, entry posted 21 JUL 10, [http://blog.eogn.com/eastmans\\_online\\_genealogy/2010/07/ellis-island-and-your-ancestors.html](http://blog.eogn.com/eastmans_online_genealogy/2010/07/ellis-island-and-your-ancestors.html) (accessed 05 NOV 11).

<sup>14</sup> Dr. Catherine Doughty, Ms. Renee Meyer, and Dr. Richard Brecht, “The Making of a Cryptologic Language Analyst,” CASL Research Synopsis, University of Maryland Center for Advanced Study of Language, FEB 10, [http://www.casl.umd.edu/cites/default/files/CASL\\_Making\\_of\\_a\\_CLA\\_V3.pdf](http://www.casl.umd.edu/cites/default/files/CASL_Making_of_a_CLA_V3.pdf) (accessed 17 MAY 11), 3.

of Investigation (FBI), the Department of State, the Department of Homeland Security (DHS), and a federally sponsored language program called the Language Flagship. In addition, I examine the much-touted success of the New York Police Department's (NYPD) foreign language program, which draws its linguists from the native and heritage speakers of one of the most diverse populations in the world. A comparison of these agencies reveals the advantages and disadvantages of recruiting native, heritage, or trained linguists, versus training personnel to speak foreign languages. I then examine how trained linguists reach native-like proficiency, drawing on existing studies and original research on the interpreter program at the Defense Threat Reduction Agency (DTRA). Finally, I offer conclusions on how best to "build"<sup>15</sup> linguists with language proficiency adequate to meet the demands of homeland defense and security. High-level language achievement is only possible through motivation, time-on-task, and immersion. In addition, organizations which employ native or heritage speakers, offer language-related incentives, utilize proficiency testing, and offer employees opportunities at work to utilize foreign language are most successful.

### **C. IMPORTANCE**

The United States government has failed to meet the foreign language demands of the Global War on Terror (GWOT). In 2008, for instance, about 40% of the Department of State's officers serving in the Near East and South and Central Asia did not meet the language requirements of their positions.<sup>16</sup> The Department of State's Foreign Service Officers process visa applications at U.S. Embassies and Consulates abroad, in which capacity they often conduct face-to-face interviews with applicants. Given that visa processing is arguably the first line of defense in homeland security, language proficiency shortfalls in this critical area should be a cause for concern.

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<sup>15</sup> I owe the concept of "building" linguists to Doughty, Meyer, and Brecht, "The Making of a Cryptologic Language Analyst," 1.

<sup>16</sup> GAO, *Department of State: Persistent Staffing and Foreign Language Gaps Compromise Diplomatic Readiness*, GAO-09-1046T, 24 SEP 09, <http://www.gao.gov/new.items/d091046t.pdf> (accessed 28 MAY 11), 5.

And the Department of State is not alone in falling short. A recent Justice Department Office of the Inspector General report found that in FY 2008, the FBI met recruitment goals for linguists in only 2 of 14 critical languages. In addition, it found that on average, it took 14 months for clearance processing and five months for language testing, or a total of 19 months, for a contract linguist to be converted to a full-time FBI linguist.<sup>17</sup> Such lengthy recruitment periods are common at agencies which conduct extensive background investigations. To be fair, the FBI has made considerable progress in hiring linguists (translators and interpreters) since 9/11. Its focus on hiring translators and interpreters, however, has perhaps inadvertently led to a reliance on their use, and a lack of development of capability among special agents. In 2006, for instance, only 33 of 12,000 special agents had any capability in Arabic.<sup>18</sup> Still, despite shortfalls, the FBI has a program in place to address these deficiencies.<sup>19</sup>

This is not the case with DHS, which lacks a coherent strategy to address linguist shortfalls. In a GAO report entitled, “DHS Needs to Comprehensively Assess Its Foreign Language Needs and Capabilities and Identify Shortfalls,” GAO determined that the Department of Homeland Security does not have a systematic method to assess its foreign language needs, let alone to address deficits.<sup>20</sup> If the Department of State’s is the first line of defense against terrorism, DHS’s Customs and Border Protection (CBP) could be considered its last. Border Patrol Agents patrol America’s borders between U.S. Ports of Entry.<sup>21</sup> DHS’s inability to address foreign language shortfalls, as determined by

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<sup>17</sup> U.S. Department of Justice, *The Federal Bureau of Investigation’s Foreign Language Translation Program*, Office of the Inspector General, Audit Division, Audit Report 10-02, OCT 09, [http://www.justice.gov/oig/reports/FBI/a1002\\_redacted.pdf](http://www.justice.gov/oig/reports/FBI/a1002_redacted.pdf) (accessed 30 MAY 11), v.

<sup>18</sup> Dan Eggen, “FBI Agents Still Lacking Arabic Skills,” *Washington Post*, 11 OCT 06, <http://www.washingtonpost.com/wp-dyn/content/article/2006/10/10/AR2006101001388.html> (accessed 30 MAY 11).

<sup>19</sup> GAO, *Foreign Languages: Human Capital Approach Needed to Correct Staffing and Proficiency Shortfalls*, GAO 02-375, JAN 02, 3.

<sup>20</sup> GAO, Department of Homeland Security: *DHS Needs to Comprehensively Assess Its Foreign Language Needs and Capabilities and Identify Shortfalls*, GAO-10-714, JUN 10, <http://www.gao.gov/new.items/d10714.pdf>, “Highlights” page (accessed 22 MAY 11).

<sup>21</sup> U. S. Customs and Border Protection, “Border Patrol Overview,” [http://www.cbp.gov/xp/cgov/border\\_security/border\\_patrol/border\\_patrol\\_ohs/overview.xml](http://www.cbp.gov/xp/cgov/border_security/border_patrol/border_patrol_ohs/overview.xml) (accessed 28 OCT 11).

GAO, calls into question just how effectively its subordinate organizations, like CBP, utilize foreign language for homeland defense and security purposes.

One organization has successfully responded to changing language requirements post-9/11: the New York Police Department, through its foreign language program. Its model, which relies on a uniquely diverse population and more permissive recruitment criteria, may not apply to other agencies with higher security clearance requirements, such as the FBI.<sup>22</sup> These agencies, whose efforts to increase recruitment are still falling short of goals, have no other options but to train non-native and non-heritage personnel.

### **1. Measuring Success in Meeting Post-9/11 Language Requirements**

There are many possible metrics to measure the success of an agency's language program. I will briefly identify four. First and foremost, an agency's foreign language program can be assessed by determining whether it meets its own foreign language goals, which governmental audits and reporting often reveal. GAO reporting, for instance, revealed that the Department of State is not meeting foreign-language goals.<sup>23</sup> Department of Justice reporting was critical of the FBI's efforts, but also showed that the FBI is closing the gap on interpreter shortfalls.<sup>24</sup> GAO reporting also revealed that DHS has not yet fully determined its linguist requirements.<sup>25</sup> Finally, NYPD's own Language Access Plan indicates that NYPD has been at least partially successful in meeting goals it established in a 2002 Language Initiative Program.<sup>26</sup>

Success can also be measured through the use of secondary sources, such as reports in journals, newspapers, and books. Over the past few years, numerous articles

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<sup>22</sup> GAO, GAO 02-375, 18.

<sup>23</sup> GAO, *Department of State: Comprehensive Plan Needed to Address Persistent Foreign Language Shortfalls*, GAO-09-955, SEP 09, "What GAO Found" page.

<sup>24</sup> U.S. Department of Justice, *The Federal Bureau of Investigation's Foreign Language Translation Program*, ii.

<sup>25</sup> GAO, GAO 10-714, "What GAO Found" page.

<sup>26</sup> NYPD, *NYPD Language Access Plan*, 21 FEB 11, [http://www.nyc.gov/html/nypd/downloads/pdf/public\\_information/nypd\\_language\\_access\\_plan\\_version2.pdf](http://www.nyc.gov/html/nypd/downloads/pdf/public_information/nypd_language_access_plan_version2.pdf) (accessed 15 NOV 11), 6–7.

have praised the New York Police Department's linguist program.<sup>27</sup> Conversely, a number of articles have been critical of the FBI's language program.<sup>28</sup> If the preponderance of evidence indicates that a program is successful, as has been the case with the New York Police Department, it would be useful to use that as a starting point for further research. Conversely, negative reporting, such as that regarding the FBI's lack of Arabic-proficient Special Agent Linguists, would also be a point of departure for further research.

Next, foreign language programs can be assessed by the extent to which they enable an organization's homeland defense and security-related mission. If increased foreign-language capability is the goal, what evidence is there that such capability will improve an organization's performance related to its mission? What evidence is there that lack of such capability has detracted from its mission? Anecdotes related by organization employees usually are the best sources for such information.

Finally, the language programs in all case studies will be evaluated by the extent to which they incorporate best practices in language training, as revealed through studies conducted by the Center for Advanced Study of Language (CASL) and the Coalition of Distinguished Language Centers (CDLC). These organizations have conducted extensive research into personal and organizational characteristics necessary to attain high foreign-language proficiency. In addition to the factors identified by CASL and CDLC, I will judge language programs by the extent to which they take advantage of best practices revealed through original research of DTRA's interpreter program. I will use a combination of governmental reporting, second-hand sources, and best practices in language learning to judge the success of individual language programs.

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<sup>27</sup> See William Finnegan, "The Terrorism Beat," *New Yorker*, 25 JUL 02, 2; Christopher Dickey, *Securing the City: Inside America's Best Counterterror Force—the NYPD* (New York: Simon & Schuster, 2009), 141.

<sup>28</sup> See Eggen, "FBI Agents Still Lacking Arabic Skills;" Moustafa Ayad, "Speaking Arabic, other Eastern Languages, is High on FBI's Wish List," *Pittsburg Post-Gazette*, 19 FEB 07, <http://www.post-gazette.com/pg/07050/763270-84.stm> (accessed 30 OCT 11).

## D. PROBLEMS AND HYPOTHESES

During the Cold War, the United States faced an organized and bureaucratic adversary in the Soviet Union, and it developed a robust signals intelligence capacity to provide intelligence. Signals intelligence, or SIGINT—the monitoring of electronic communications—was divided into very narrowly focused missions, allowing for relatively junior linguists to successfully work within the field.<sup>29</sup> The process was something akin to an assembly line, with each linguist adding her piece to a final product, which more experienced linguists would assemble as “finished” intelligence. A linguist could perform her job upon reaching ILR Level 2,<sup>30</sup> which required only around a year of study in more difficult critical languages, such as Russian. I will refer to this as the Cold War Model. The success of this program created the illusion that one could learn a language to a professional level of proficiency within a relatively short period of time. This illusion persists today, giving policy-makers the mistaken impression that intensive courses alone will succeed in bringing linguists to high levels of proficiency.

The rise of Al Qaeda and the individual terrorist cell caused a shift in the nature of communications SIGINT operators intercepted. Rather than standardized military transmissions, which could be handled by a junior linguist, operators now intercepted e-mails and cellphone calls, which required native-like proficiency to understand.<sup>31</sup> Linguists were asked to perform at ILR Level 3<sup>32</sup> or 4<sup>33</sup>—a capability few possessed.

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<sup>29</sup> Dr. Richard Brecht, “The Language Crisis in the War on Terror,” The Eisenhower Institute, 24 OCT 02, Meeting report by Josh Kolchins, [http://www.eisenhowerinstitute.org/events/past\\_events/old\\_events/102102Brecht.dot](http://www.eisenhowerinstitute.org/events/past_events/old_events/102102Brecht.dot) (accessed 09 FEB 11).

<sup>30</sup> Interagency Language Roundtable Level 2 – Limited Working Proficiency. ILR is a standardized measurement of foreign language proficiency. ILR proficiency levels range from 0 (no proficiency) to 5 (functionally native proficiency), although the vast majority of foreign-language speakers will never progress beyond ILR Level 3 – General Professional Proficiency. Linguists are tested by modality: listening, reading, speaking, and writing, although writing is rarely assessed. When one score is listed, it generally refers to that score across two or three modalities (speaking/reading or listening/reading/speaking). The military lists ILR scores in the following order: listening/reading/speaking, while the Department of State lists them as: speaking/reading. See Appendix for further definition. Also see Interagency Language Roundtable (<http://www.govtilr.org/>) for detailed descriptions.

<sup>31</sup> GAO, GAO 02–375, 12.

<sup>32</sup> General Professional Proficiency. See Appendix for further definition.

<sup>33</sup> Advanced Professional Proficiency. See Appendix for further definition.

Since 9/11, grasping to deal with the requirements of two on-going wars in Asia, agencies within the United States government have relied heavily on recruitment to meet demands.<sup>34</sup> While NYPD has experienced great success in the recruitment of native and heritage speakers, the Department of State and the FBI have consistently not reached hiring goals.<sup>35</sup> The Department of State stands alone as the only organization which has developed training programs above ILR Level 3.<sup>36</sup> While further research will clarify this issue, there is no indication that the FBI ever developed a training pipeline to achieve high-level language proficiency. Like the FBI, DHS largely appears to be holding on to the Cold War model of intensive courses alone to train personnel in its most important language, Spanish,<sup>37</sup> although there is also evidence that it also relies heavily on native and heritage speakers.<sup>38</sup> Comparison of all four organizations will show that each has experienced uneven success in the recruitment or training of its personnel in foreign languages, and NYPD alone seems to have sufficient foreign language capability to meet post-9/11 requirements.

My argument is that the recruitment of native, heritage, and trained linguists alone will not meet post-9/11 language needs for the federal government, so personnel will have to be trained. But the Cold War Model alone will not reliably produce ILR Level 3/4 linguists, and consequently, a new model needs to be developed. Research has revealed that there are multiple pathways to ILR Level 3/4 proficiency, most of which contain certain common elements, such as time-on-task, immersion, and motivation on the part of the student, in addition to *time*.<sup>39</sup> Preliminary research indicates that, in a

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<sup>34</sup> LT Sean Stevens, “Khasan Tawanestan! – ‘We Can, We Will!’ Shaping the Battlefield in Afghanistan in Dari and Pashto – not English,” *Small Wars Journal*, 07 SEP 10, <http://smallwarsjournal.com/blog/journal/docs-temp/528-stevens.pdf> (accessed 28 MAY 11), 3.

<sup>35</sup> GAO, GAO-02-375, 2.

<sup>36</sup> Madeline E. Ehrman, “Understanding the Learner at the Superior-Distinguished Threshold,” in *Developing Professional-Level Language Proficiency*, eds. Betty Lou Leaver and Boris Shekhtman (New York: Cambridge University Press, 2002), 247.

<sup>37</sup> GAO, GAO-10-714, 3.

<sup>38</sup> *Border Wars*, season 1, created by Nick Stein (Washington, DC: National Geographic Channel, 2010), DVD.

<sup>39</sup> Dr. Betty Lou Leaver, *Achieving Native-Like Second Language Proficiency, Volume 1: Speaking* (Salinas, CA: MSI Press, 2003), 142–143.



best-case scenario, it take from three to five years for a linguist to attain General to Advanced Professional Proficiency (ILR Level 3 to 4). With such long pipelines, the necessity of identifying best practices becomes apparent.

## **E. LITERATURE REVIEW**

### **1. Post-9/11 Language Requirements**

Since 9/11, innumerable reports, papers, and op-eds have emphasized the need for more government personnel to speak critical languages at higher levels of proficiency.<sup>40</sup> No fewer than ten GAO reports have been written on “language shortfalls”<sup>41</sup> within the United States Government. Although writers uniformly point to an increased need for foreign language capability, specific details about the benefits of increased capability are less common.

In terms of intelligence functions, however, some reports have provided a high level of specificity. In 2004, the 9/11 Commission criticized the FBI, stating that it “lacked sufficient translators proficient in Arabic and other key languages, resulting in a significant backlog of untranslated intercepts.”<sup>42</sup> Similarly, a 2010 GAO report on DHS stated that the lack of language capability has “resulted in backlogs in translation of intelligence documents and other information, adversely affected agency operations, and hindered U.S. military, law enforcement, intelligence, counterterrorism, and diplomatic efforts.”<sup>43</sup> The intelligence field literature confirms that increased foreign language capability is required both for translation and SIGINT purposes.

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<sup>40</sup> For further information, see, e.g.: U.S. Congress. House. *Intelligence Authorization Act for Fiscal Year 2002*, 107<sup>th</sup> Cong., 1st sess., 107–219, [http://www.fas.org/irp/congress/2001\\_rpt/hrep107-219.html](http://www.fas.org/irp/congress/2001_rpt/hrep107-219.html) (accessed 20 MAY 11), Sec. 1., Foreign Language Expertise; Dr. Richard Brecht, “The Language Crisis in the War on Terror,” U.S. Department of State, *National Security Language Initiative*, Office of the Spokesman, Briefing by Dina Powell, Washington, D.C., 05 JAN 06, <http://merln.ndu.edu/archivepdf/nss/state/58733.pdf> (accessed 09 FEB 11).

<sup>41</sup> GAO, *Department of State: Staffing and Foreign Language Shortfalls Persist Despite Initiatives to Address Gaps*, GAO-07-1154T, 01 AUG 07, <http://www.gao.gov/new.items/d071154t.pdf> (accessed 10 NOV 11).

<sup>42</sup> The National Commission of Terrorist Attacks Upon the United States, *The 9/11 Commission Report: Final Report of the National Commission of Terrorist Attacks upon the United States* (New York: W. W. Norton & Company, 2004), 77.

<sup>43</sup> GAO, GAO-10-714, 2.



In terms of governmental functions other than intelligence collection, the 2010 GAO report on DHS cites two concrete examples of why DHS needs improved Spanish language capacity. In one instance, a Texas law enforcement officer, while conducting a traffic stop, attempted to interview four Spanish-speaking occupants of a vehicle. The officer's dash-mounted camera recorded him having difficulty understanding their responses, and then the four begin talking amongst themselves. Shortly thereafter, they attacked and killed the officer. Another instance involves an Immigrations and Customs Enforcement (ICE) special agent who was shot during a botched drug-bust. In this case, an undercover ICE agent was conducting a meeting with two Colombian drug dealers, while other agents monitored the meeting remotely. The ICE agent was convinced that, had at least one of the other agents monitoring the bust spoken Spanish, they would have understood what was going on, and not made a decision to rush in on the meeting when they did. As a result, in the ensuing confusion, the ICE agent was accidentally shot and paralyzed by another agent.<sup>44</sup> In both instances, proponents argue that increased knowledge of the Spanish language may have prevented these tragedies. These examples also illustrate that the increased focus on language capacity post-9/11 is not confined to critical languages, but also extends to more widely-spoken languages such as Spanish. Contrary to the common perception that the United States Government has sufficient capacity in Spanish, the DHS GAO report reveals that law enforcement officials believe they receive insufficient training in regional dialects of Spanish, citing as an example that the mistranslation of "tumbarlo" from one dialect to the next could result in confusing "arrest him" for "kill him."<sup>45</sup>

In addition to the obvious needs of diplomacy, the State Department also has significant language requirements relating to homeland defense and security, such as the need to be able to conduct visa adjudication interviews in local languages. Here, again, GAO reporting indicates that there are significant language shortfalls, citing a statistic that 8 out of 25 posts visited had at least one consular officer who did not meet language

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<sup>44</sup> GAO, GAO-10-714, 18.

<sup>45</sup> GAO, GAO-10-714, 25.

requirements.<sup>46</sup> In one instance, consular officials reported that they made visa adjudication decisions based on what they “hope” they heard in interviews, suggesting a total lack of confidence in their ability to conduct interviews in the foreign language.<sup>47</sup>

Thus, the literature points to widespread deficits in language capacity, both in critical languages and in more widely spoken ones, as inhibiting the United States government’s ability to perform multiple crucial homeland security functions.

## **2. Pinpointing Exact Requirements Regarding Language Proficiency**

There is no consensus in the literature regarding exactly what level of proficiency (ILR Level 3 or ILR Level 4) is needed to address post-9/11 language needs. Leaver focuses her research on ILR Level 4,<sup>48</sup> while other respected experts, such as Malone and colleagues, focus on ILR Level 3.<sup>49</sup> Brecht argues that the specific job will determine the precise requirement, but that ILR Level 3 and 4 are both needed.<sup>50</sup> Shekhtman and colleagues concisely summarize the differences between the two levels: “The difference between these two levels is in the refinement, depth, and breadth of expression used in accomplishing the tasks, as well as in the sophistication of the tasks themselves.”<sup>51</sup> When U.S. government agencies explicitly state requirements, they tend to focus more on ILR Level 3.<sup>52</sup> This could be because the Cold War standard was ILR Level 2, and ILR Level 4 seems too great a leap.

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<sup>46</sup> GAO, *Border Security: Strengthened Visa Process Would Benefit from Improvements in Staffing and Information Sharing*, GAO 05–859, SEP 05, <http://www.gao.gov/new.items/d05859.pdf> (accessed 28 MAY 11), 18.

<sup>47</sup> GAO, GAO-09–1046T, 7.

<sup>48</sup> Leaver, *Achieving Native-Like Second Language Proficiency*, xii.

<sup>49</sup> Margaret E. Malone, Benjamin Rifkin, Donna Christian, and Dora E. Johnson, “Attaining High Levels of Proficiency: Challenges for Language Education in the United States,” *Journal for Distinguished Language Studies* 2 (2004): 67.

<sup>50</sup> Dr. Richard Brecht, “The Language Crisis in the War on Terror.”

<sup>51</sup> Boris Shekhtman, Natalia Lord, and Ekaterina Kuznetsova, “Complication Exercises for Raising the Oral Proficiency Level of Highly Advanced Language Students,” in *Journal for Distinguished Language Studies* 1, no. 1(Spring 2003): 31.

<sup>52</sup> Brecht, “The Language Crisis in the War on Terror.”

Researchers have also disagreed as to the amount of time required to reach such levels. Doughty, Meyer, and Brecht conclude that it takes from 3 to 8 years to create an ILR Level 3 Crypto-analyst.<sup>53</sup> Leaver concludes that, on average, it takes 17 years to achieve ILR Level 4, although she cites examples of it taking fewer than 5.<sup>54</sup> These examples of reaching ILR Level 4 in fewer than five years deserve further study.

### 3. Best Practices in “Building” Linguists

Broadly, there are two organizations which have conducted research into the demographics, education, and habits of high-proficiency linguists: the Coalition of Distinguished Language Centers (CDLC), and the University of Maryland’s Center for Advanced Study of Language (CASL). Dr. Betty Lou Leaver, who edits many of CDLC’s publications, has also conducted significant studies on her own. Her most relevant study looked at linguists from academia and a variety of occupations who had tested at ILR Level 4.<sup>55</sup> CASL’s study, which is actually composed of a number of smaller studies that I group together here for clarity, is part of an ongoing examination of highly successful National Security Agency, Department of State, and Federal Bureau of Investigation linguists.<sup>56</sup>

In terms of actual best practices in language instruction, a review of relevant literature makes clear that there are multiple pathways to high-level language learning success,<sup>57</sup> none of which involves merely completing an intensive course of instruction, as under the Cold War model. Malone and colleagues argue that due to the inordinate amount of time necessary to bring a student to ILR Level 3, classroom instruction alone is likely to be insufficient.<sup>58</sup> CLDC and CASL’s research comes to similar conclusions.

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<sup>53</sup> Doughty, Meyer, and Brecht, “The Making of a Cryptologic Language Analyst,” 3.

<sup>54</sup> Leaver, *Achieving Native-Like Second Language Proficiency*, 101.

<sup>55</sup> Leaver, *Achieving Native-Like Second Language Proficiency*, 6.

<sup>56</sup> Dr. Catherine Doughty, Karen Vatz, Lesley Howard, Kathy Rhoad, Sarah Stimley, and Amanda Lutz, *Becoming an Expert FBI Interpreter: Preliminary research reveals common factors among the most successful interpreters*, The University of Maryland Center for Advanced Study of Language, 2008, [http://www.casl.umd.edu/sites/default/files/Doughty08\\_BecominganExpert.pdf](http://www.casl.umd.edu/sites/default/files/Doughty08_BecominganExpert.pdf) (accessed 15 NOV 11).

<sup>57</sup> Leaver, *Achieving Native-Like Second Language Proficiency*, 141.

<sup>58</sup> Malone et al., “Attaining High Levels of Proficiency,” 69.

With regards to specific factors in high-proficiency language achievement, there are too many to list here. Leaver alone identifies 30, focusing heavily on the role of directed study.<sup>59</sup> A similar CDLC publication identifies 28, such as childhood experiences, and professional use of language, and the influence of other language skills in developing speaking proficiency.<sup>60</sup> In Chapter II, I compare six recent studies of high-proficiency linguists, and analyze those practices and factors which all six share in common.

#### **4. Gaps in the Literature**

Since 2002, the Government Accountability Office (GAO) has consistently recommended the application of a human capital approach to correct “staffing and proficiency shortfalls” in foreign languages.<sup>61</sup> Specifically, GAO recommends the use of the Office of Personnel Management’s five-step Workforce Planning model. This model recommends to: “(1) Set strategic direction, (2) Determine supply, demand, and discrepancies, (3) Develop an action plan, (4) Implement action plan, and (5) Monitor, evaluate, and revise.”<sup>62</sup> While this methodology has some merit in terms of raising institutional awareness of manning shortfalls, it provides no specific instructions for how to improve foreign language capability. Building high proficiency linguists has proven itself a wicked problem<sup>63</sup> that cannot be solved through the generic application of human capital strategies alone. Recent studies conducted by CASL and CLDC have identified numerous best practices in high-level language training, but this has not found its way into human capital-based recommendations, such as GAO’s. Sound practices in building linguists need to be incorporated into the very process of human capital management, and no recommendations have yet done this.

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<sup>59</sup> Leaver, *Achieving Native-Like Second Language Proficiency*, 101.

<sup>60</sup> Dr. Betty Lou Leaver, ed. *What Works: Helping Students Reach Native-Like Second Language Competence*. Coalition of Distinguished Language Centers (Hollister, CA: MSI Press, 2008).

<sup>61</sup> GAO, *Foreign Languages: Human Capital Approach Needed to Correct Staffing and Proficiency Shortfalls*, GAO 02–375, JAN 02.

<sup>62</sup> GAO, GAO 02–375, 21.

<sup>63</sup> Horst W. J. Rittel and Melvin M. Weber, “Dilemmas in a General Theory of Planning,” in *Policy Sciences* 4 (1973), 155–169, [http://amorystarr.com/ad\\_ict4d\\_reader/rittel1973.pdf](http://amorystarr.com/ad_ict4d_reader/rittel1973.pdf) (accessed 28 MAY 11).

In addition, NYPD's foreign language program has never been included in a federal language report as a point of comparison. It is, perhaps, not surprising that a city-level agency would not be used as a point of comparison in a federal report, but the changing nature of homeland defense and security demands that those traditional barriers be broken-down. NYPD has seen success in recruiting linguists where the FBI and the Department of State have faltered. What are possible explanations for this?

## **5. Conclusion**

If increased recruitment is not meeting the demand, existing linguists will have to be trained to higher levels of proficiency. The Cold War methodology was not designed to train large numbers of linguists to ILR Level 3 or higher. This thesis identifies those best practices which can facilitate the achievement of higher levels of proficiency (ILR Level 3 or higher) necessary for homeland defense and security.

## **F. METHODS AND SOURCES**

As the main focus of this thesis, I conduct an in-depth case-study of DTRA's Russian interpreter program. By conducting verification for the New Strategic Arms Reduction Treaty (New START), Conventional Armed Forces in Europe Treaty (CFE), Plutonium Production Reactor Agreement, and others, DTRA performs crucial homeland defense and security functions.<sup>64</sup> Previous case studies by Leaver and CASL have focused on high-level linguists in academia, at NSA, the Department of State, and the FBI. This study of DTRA broadens the existing data set to include DoD, thereby facilitating comparative analysis. In conducting original thesis research, in August of 2011, I conducted personal interviews with 17 current and former DTRA Russian interpreters in both Monterey, California, and Fort Belvoir, Virginia, using a questionnaire adapted from Doughty and Kamide's study.<sup>65</sup> In addition, I observed language instruction, toured DTRA facilities, and talked with the staff of the On-Site Directorate of the Defense Threat Reduction Agency to obtain factual material.

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<sup>64</sup> Defense Threat Reduction Agency, *Arms Control Treaties and Agreements*, Russian Arms Control Speaking Proficiency Course, Trimesters II & III, 2011, iv-v.

<sup>65</sup> Doughty and Kamide, *Pathways to High-level Success in Foreign Language Learning*, Appendix A.

In addition to conducting original research, I utilize secondary sources to analyze the FBI, Department of State, DHS, and NYPD language programs. While there are many homeland security-related language programs, sufficient secondary sources exist for these organizations to allow for comparative analysis.<sup>66</sup> Through in-depth analysis of best practices in high-proficiency foreign-language instruction and DTRA's language program, and by conducting comparative analysis with five other language programs, I determine overall best practices in high-proficiency foreign-language programs, such as employing native or heritage speakers, offering language-related incentives, utilizing proficiency testing, and utilizing employees with foreign language proficiency. I also come to conclusions about how best to "build" linguists in the post-9/11 world for homeland defense and security purposes through motivation, time-on-task, and immersion.

## **G. THESIS OVERVIEW**

Chapter II analyzes the existing state of discussion on best practices in "building" linguists. Chapter III then presents original research on DTRA's interpreter program, combining those best practices discussed in Chapter II, with the results of original thesis research. Chapter IV then uses the best practices identified in Chapters II and III as points of comparison for four short case-studies on other federal and local language programs. Finally, Chapter V draws conclusions and suggests avenues for further research.

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<sup>66</sup> Where secondary sources proved insufficient, I contacted each organization to request additional data.

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## II. BEST PRACTICES IN “BUILDING” LINGUISTS

If, as research suggests, high-level language learning<sup>67</sup> requires more than intensive classroom study, then organizations’ managers have a role to play in their linguists’ development. This role includes selecting the right personnel for language training, assigning personnel with foreign-language proficiency to positions which require its regular use, and offering recurrent language training and immersion experiences to employees, to name a few practices. Yet, perhaps the most confounding aspect of high-level language learning is that there are multiple pathways to success.<sup>68</sup> From an organizational perspective, this multiplicity of pathways complicates the process of establishing a recruiting, training, and utilization model, and demands that linguist selection and management be informed by an understanding of linguist development. If every linguist were the same, and if sufficient talent were already available, implementing strategic workforce guidance, such as recommended by GAO for the Department of Homeland Security, would suffice to solve manning and proficiency shortfalls.<sup>69</sup> Based on analysis of prior studies, this chapter identifies certain characteristics of high-level language learning that can be influenced by organizational management.<sup>70</sup> These characteristics include both personal factors, such as motivation, and organizational practices, such as language training and utilization. Once I have

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<sup>67</sup> For the purposes of this thesis, “high-level” and “high-proficiency” are defined as ILR Level 3 or ACTFL Superior level or above. This level is sufficient to conduct many tasks in a work environment. Betty Lou Leaver and Boris Shekhtman, “Principles and Practices in Teaching Superior-level Language Skills: Not Just More of the Same,” in *Developing Professional Level Language Proficiency*, eds. Betty Lou Leaver and Boris Shekhtman (New York: Cambridge University Press, 2002), 13.

<sup>68</sup> Malone and colleagues take a more dour view, stating instead that “because so few high-level learners of foreign language exist, there are few proven approaches to ‘develop’ such speakers.” Quoted from Malone et al., 69.

<sup>69</sup> GAO, GAO-10-714, “What GAO Found” page.

<sup>70</sup> Each of six studies identified between 5 and 30 characteristics of high-proficiency language learning. After comparing and synthesizing these studies, I identified those factors and characteristics common to at least two or more of the studies. Of these, I examined those that I determined could readily be influenced at the organizational level. The following studies were compared: CDLC, *What Works: Helping Students Reach Native-Like Second-Language Competence*; Leaver, *Achieving Native-Like Second Language Proficiency, Volume 1: Speaking*; Doughty and Kamide, *Pathways to High-Level Success in Foreign Language Learning*; Malone et al., *Attaining High Levels of Proficiency: Challenges for Language Education in the United States*; Clausner et al., *Pathways to Success*; Mueller, *Tracing the Steps of a Successful Multilingual: A Synopsis*. See List of References for further citation information.



identified these characteristics (“best practices”), I will use them in Chapters III and IV to determine the extent to which DTRA, the FBI, DHS, the Department of State, and NYPD have integrated them into their foreign language programs. Previous studies have evaluated high-proficiency linguists and have evaluated the effectiveness of government language programs, but no study has yet evaluated DTRA and NYPD’s language programs, and no study has so closely joined an evaluation of best practices in high-proficiency language acquisition with an evaluation of the effectiveness of government language programs. Armed with an understanding of personal characteristics common to high-level language learners, organizations can better screen prospective employees. And if aware of which training programs and methods of employment have proven most conducive to high level language achievement, organizations can adjust their practices accordingly.

This chapter is divided into three sections: the Cold War model, personal factors, and organizational factors. The first section reviews best practices developed during the Cold War, and shows how they are insufficient to meet post-9/11 language requirements. The next two sections synthesize the recommendations of six studies on high-level language learning. Personal Factors lists personality traits or life experiences which may indicate a propensity for high-level language learning, and thus enable organizations to better select personnel. These are early exposure to language, confidence, and motivation. Organizational Practices lists those organizational practices which have been shown to facilitate high-level language learning. These are assessment, time on task, the interaction of language modalities, and the importance of immersion. In some cases, such as motivation and immersion, the topic may inherently be affected by both personal and organizational inputs. In these instances, the factor is categorized based on how it can most readily be influenced, whether by personnel selection criteria, or overall organizational practices.

#### **A. COLD WAR BEST PRACTICE-INTENSIVE COURSES**

The legacy of Cold War successes lies at the heart of the debate over how to best train and utilize linguists in the post-9/11 environment. During the Cold War, the

military's success in meeting the demand for language capacity left the false impression that a linguist can be created in a mere 47 weeks. While colleges took four years to produce only marginally capable linguists, the military developed a model capable of churning them out in less than a year. But just what type of linguists were these? The military historically used linguists in Signals Intelligence role (SIGINT). While the nature of what these linguists do is largely classified, open sources indicate that their required skill-set is largely passive, consisting primarily of listening and reading.<sup>71</sup> Thus, the Cold War model emphasized listening and reading over speaking. This model's success created a false impression that such a model can meet the demands of any mission, including those of the post-9/11 world in which speaking is now prized above listening and reading.

The United States Navy, for instance, uses enlisted linguists in a rating called Cryptologic Technician Interpretive (CTI).<sup>72</sup> As Michael F. D'Angelo points out in his thesis, "Options for Meeting U.S. Navy Foreign Language and Cultural Awareness Requirements in the Post-9/11 Security Environment,"

The Navy considers a Cryptologic Technician Interpretive to be a professional linguist. However, CTI personnel are more than just translators or interpreters. They are highly skilled cryptologic language analysts whose core competencies emphasize the passive language skills.<sup>73</sup>

CTIs, like other enlisted linguists from all branches of the military, study at the Defense Language Institute (DLI) through intensive courses of 26 to 64 weeks in length.<sup>74</sup> These courses, while technically "global" in nature,<sup>75</sup> have a tendency to favor

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<sup>71</sup> Michael F. D'Angelo, "Options for Meeting U.S. Navy Foreign Language and Cultural Awareness Requirements in the Post 9/11 Security Environment" (master's thesis, U.S. Naval Postgraduate School, 2009), 1-2.

<sup>72</sup> D'Angelo, "Options for Meeting U.S. Navy Foreign Language and Cultural Awareness Requirements in the Post 9/11 Security Environment," 1-2.

<sup>73</sup> In addition, the military's contemporary payment of foreign language proficiency pay based on listening and reading, not speaking, mirrors this emphasis on passive skills. D'Angelo, "Options for Meeting U.S. Navy Foreign Language and Cultural Awareness Requirements in the Post 9/11 Security Environment," 49.

<sup>74</sup> DLIFLC, "About DLIFLC," <http://www.dliflc.edu/about.html> (accessed 31 OCT 11).

military-related topics. As one DTRA linguist interviewed for this study observed, “I had been in DLI like six months or something before I learned basic food and items of furniture in a room. If you were learning for global, that would be the first stuff you would learn.”

The goal of basic courses is for linguists to test at ILR Level 2 upon course completion in listening, reading, and speaking. The fact that DLI is able to achieve this consistently in such a short period of time is impressive, but ILR Level 2 in speaking is not a professional level of proficiency. Instead, it is defined as “Able to satisfy routine social demands and limited work requirements.”<sup>76</sup>

By working “professionally” with their languages, ILR Level 2 linguists created an illusion that they had a “professional” level of proficiency (ILR Level 3–4). The nature of their work allowed for linguists with lower levels of proficiency to function in this model, but the linguistic demands of the post-9/11 world now are poking holes in the myth that an ILR Level 2 linguist has professional-level proficiency.<sup>77</sup> Intensive courses alone cannot consistently produce such linguists—it is just not possible in such a short period of time, with such limited exposure—and it something that the military has never consistently done.

This brief review of the Cold War model for building linguists suggests that it, alone, cannot produce linguists capable of completing the tasks required for homeland defense and security.

## **B. PERSONAL FACTORS**

### **1. Early Exposure to Foreign Language**

The U.S. government has begun to recognize the value of earlier exposure to foreign language. A 2010 report by the U.S. House Subcommittee on Oversight noted

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<sup>75</sup> “Global” refers to non-specialized language training, covering non-specialized topics as how to order a meal, asking for directions on the street, or having a conversation about one’s family.

<sup>76</sup> See Appendix for a description of the different ILR levels.

<sup>77</sup> Each subsection to this chapter will provide examples of what specific level and type of language proficiency is needed for post-9/11 homeland defense and security needs.

that intensive programs rarely produce more than ILR Level 2 results and identified a need to train linguists earlier (in this case, as cadets and midshipmen).<sup>78</sup> Through a program called The Language Flagship, the National Security Language Initiative has endeavored to expand the teaching of foreign languages in public elementary schools.<sup>79</sup>

Broadly, there are two benefits ascribed to childhood exposure to foreign languages. First, the earlier one begins learning a foreign language, the longer one has to reach mastery, and the greater the likelihood one will attain higher proficiency earlier in life. Second, children tend to learn foreign languages more quickly than adults, and have fewer entrenched language patterns to overcome. In terms of the first claim, Leaver argues that her research of over 50 ILR Level 4 linguists shows no connection between age of first study, and the speed with which a linguist achieved ILR Level 4.<sup>80</sup> Moreover, the level of erudition required to learn a foreign language to the General Professional and Advanced Professional levels (ILR 3/4) is generally achieved only later in life, so early exposure to language may be less important in professional competency than conventional wisdom would suggest.<sup>81</sup>

In terms of the second claim, Malone and colleagues argue that early exposure to languages and culture better prepares students to learn languages later in life.<sup>82</sup> Leaver observes that most of her population of linguists had early exposure to foreign languages,<sup>83</sup> but also adds that, contrary to conventional wisdom, adult learners are

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<sup>78</sup> U.S. Congress. "Building Language Skills and Cultural Competencies in the Military: Bridging the Gap," House. Committee on Armed Services, Subcommittee on Oversight and Investigations, DEC 10, [http://armedservices.house.gov/index.cfm/files/serve?File\\_id=2361fa65-7e40-41df-8682-9725d1c377da](http://armedservices.house.gov/index.cfm/files/serve?File_id=2361fa65-7e40-41df-8682-9725d1c377da) (accessed 16 MAY 11), 15. See also Col. John Conway, "Civilian Language Education in America," *Air and Space Power Journal* 21 (Fall 2010), [http://www.airpower.maxwell.af.mil/airchronicles/apj/apj10/fal10/2010\\_3\\_06\\_conway.pdf](http://www.airpower.maxwell.af.mil/airchronicles/apj/apj10/fal10/2010_3_06_conway.pdf) (accessed 10 Nov 10), 78.

<sup>79</sup> U.S. Department of Education, *Enhancing Foreign Language Proficiency in the United States: Preliminary Results of the National Security Language Initiative*, Office of Postsecondary Education (Washington, D.C., 2008) <http://www2.ed.gov/about/inits/ed/competitiveness/nsli/nsli-preliminary-results.pdf>, (accessed 11 Nov 10), 1.

<sup>80</sup> Leaver, *Achieving Native-Like Second Language Proficiency*, 19.

<sup>81</sup> Leaver, *Achieving Native-Like Second Language Proficiency*, 20.

<sup>82</sup> Malone et al., "Attaining High Levels of Proficiency," 71.

<sup>83</sup> Leaver, *Achieving Native-Like Second Language Proficiency*, 15.

capable of achieving native-like accents,<sup>84</sup> which is a benefit that Malone and colleagues specifically ascribe to children.<sup>85</sup> A large part of Leaver's work frankly attempts to "debunk the myth" that children are better at learning foreign languages, and that adults cannot learn then to high levels of proficiency.<sup>86</sup>

While it is difficult to argue with the logic that starting the study of a foreign language earlier will increase a student's time on task, and that children may be able to develop native-like accents easier than adults,<sup>87</sup> the research suggests that high-proficiency in foreign languages is something that happens inherently later in life, questioning conventional wisdom that with foreign languages, earlier is better.<sup>88</sup>

## 2. Confidence

Anecdotal evidence would suggest that those who lack self-confidence in their foreign language abilities rarely use them (due to fear of failure), and thus do not excel. Two of the six studies cited confidence as a characteristic of language success. Mueller defines confidence as "an individual's sense of poise and self-assurance within the language acquisition process."<sup>89</sup> Mueller identified confidence as aiding in the language development of his three profiled linguists, while Clausner and colleagues identify a lack of confidence among foreign language professionals who had failed to achieve ILR Level 3 in their target language.<sup>90</sup> Conversely, among their high-level foreign language professionals, Clausner and colleagues identified confidence as a distinguishing characteristic.<sup>91</sup> And in a study of high-level FBI interpreters, Doughty and colleagues

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<sup>84</sup>Leaver, *Achieving Native-Like Second Language Proficiency*, 20.

<sup>85</sup> Malone et al., "Attaining High Levels of Proficiency," 71.

<sup>86</sup> Leaver, *Achieving Native-Like Second Language Proficiency*, 19–20.

<sup>87</sup> Leaver, *Achieving Native-Like Second Language Proficiency*, 19.

<sup>88</sup> Leaver, *Achieving Native-Like Second Language Proficiency*, 19.

<sup>89</sup> Charles M. Mueller, "Tracing the Steps of a Successful Multilingual: A Synopsis," in *Journal for Distinguished Language Studies* 1, no. 1 (Spring 2003), 51.

<sup>90</sup> Timothy Clausner, Kathy Rhoad, Melissa Fox, Jean Hobbs, Toby Merriken, Amanda Lutz, Karen Vatz, and Catherine Doughty, *Pathways to Success: Comparison of Language Histories and Learning Experiences*, University of Maryland Center for Advanced Study of Language, 2009, 2.

<sup>91</sup> Clausner et al., *Pathways to Success: Comparison of Language Histories and Learning Experiences*, 4.

noted that extroversion was a common characteristic. Despite differing slightly from confidence, Doughty and colleagues' implied meaning in extroversion was a willingness to speak to others in a foreign language and make mistakes, which closely approximates confidence's importance in high-level language acquisition.<sup>92</sup>

Research into confidence in second language acquisition suggests that it affects language-learning, as well as motivation. Those who have had negative experiences learning a foreign language are more likely to have anxiety about the language learning process, and anxiety about language learning may actually impede language acquisition.<sup>93</sup> It follows then, that as anxiety may impede language acquisition, confidence may benefit it. Confidence's role in second language acquisition, however, is far from decided. Like motivation, it is still the subject of much research.

### **3. Motivation**

Four out of six studies refer specifically to motivation as a characteristic of high-proficiency linguists, and motivation's importance is at least implicit in almost all available literature regarding high-proficiency linguists. Ryan and Deci define motivation as follows: "To be motivated means *to be moved* to do something."<sup>94</sup> Studies have been conducted analyzing motivation in second language acquisition since the late 1950s,<sup>95</sup> and most have endeavored to define a series of types of motivation and how they relate to one another. From an organizational perspective, however, identifying specific kinds of motivation may be less important. Previous research has suggested that the specific type of motivation is not a critical factor in determining high-level foreign language success.<sup>96</sup> Moreover, motivation is somewhat binary in nature—it is either

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<sup>92</sup> Doughty et al., *Becoming an Expert FBI Interpreter*, 3, 19.

<sup>93</sup> Robert C. Gardner, "Attitudes and Motivation in Second Language Learning," in *Bilingualism, Multiculturalism, and Second Language Learning: The McGill Conference in Honour of Wallace E. Lambert*, ed. Allan G. Reynolds (New Jersey: Lawrence Erlbaum Associates, 1991), 58.

<sup>94</sup> Richard M. Ryan and Edward L Deci, "Intrinsic and Extrinsic Motivation: Classic Definitions and New Directions," in *Contemporary Educational Psychology*, 25 (2000): 54–67 (author's emphasis).

<sup>95</sup> Betty Lou Leaver, "Motivation at Native-Like Levels of Foreign Language Proficiency: A Research Agenda," *Journal for Distinguished Language Studies* 1, no. 1(Spring 2003), 59.

<sup>96</sup> Doughty and Kamide, *Pathways to High-level Success in Foreign Language Learning*, 29.

there, or not. And even when present, motivation will not, alone lead to a high level of proficiency in a foreign language.<sup>97</sup> Furthermore, research indicates that motivation may shift throughout one's language-learning process: what provided motivation at the early stages may not motivate past a certain level of proficiency.<sup>98</sup>

Still, given the fact that four out of six studies explicitly link motivation to high-level language learning, its fundamental role cannot be denied. Organizations can implement measures to affect motivation, and some have already done so by offering foreign language proficiency pay. Motivation has been classified and categorized by social-science research since the late 1950s, but I will frame my analysis within what Leaver refers to the "traditional models,"<sup>99</sup> Intrinsic and Socio-Education.<sup>100</sup>

#### *a. Intrinsic Model*

The Intrinsic model focuses on the source of motivation, intrinsic or extrinsic.<sup>101</sup>

(1) Intrinsic Motivation.<sup>102</sup> Ryan and Deci define "intrinsic" as simply "doing an activity for its inherent satisfaction rather than some separable consequence."<sup>103</sup> Intrinsic motivation, as related to foreign language acquisition, is "interest in the language, enjoyment of learning, and a sense of satisfaction"<sup>104</sup> independent of any external goal.

Despite intrinsic motivation being commonly self-identified by high-performance linguists, some actually have little intrinsic interest in the language or

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<sup>97</sup> Doughty and Kamide, *Pathways to High-level Success in Foreign Language Learning*, Volume 1, 27.

<sup>98</sup> Leaver, "Motivation at Native-Like Levels of Foreign Language Proficiency," 60.

<sup>99</sup> Leaver, "Motivation at Native-Like Levels of Foreign Language Proficiency," 59.

<sup>100</sup> Leaver, "Motivation at Native-Like Levels of Foreign Language Proficiency," 59, citing Deci and Ryan (1975), and Gardner and Lambert (1959).

<sup>101</sup> Leaver, "Motivation at Native-Like Levels of Foreign Language Proficiency," 59.

<sup>102</sup> In Doughty and Kamide's study, they do not use the Intrinsic model, instead adding "Personal" motivation as an additional category to the Socio-Educational Model. Doughty and Kamide, *Pathways to High-level Success in Foreign Language Learning*, Volume 1, 28.

<sup>103</sup> Ryan and Deci, "Intrinsic and Extrinsic Motivation: Classic Definitions and New Directions," 56.

<sup>104</sup> Leaver, "Motivation at Native-Like Levels of Foreign Language Proficiency," 60.

culture they are studying.<sup>105</sup> According to Leaver, tenacity may be driving these and other linguists to success.<sup>106</sup> Relatedly, Clausner and colleagues observe that successful linguists characterized inhibiting factors as “obstacles to overcome,” whereas less successful linguists characterized them as “roadblocks,” thus perhaps showing examples of tenacity and its absence.<sup>107</sup> Doughty and Kamide focus on how high-proficiency linguists exhibited a strong desire to “know and deeply understand people and the country, and to ‘fit in.’”<sup>108</sup>

(2) Extrinsic Motivation. Extrinsic motivation can be described as “rewards, teacher approbation, or, as in instrumental motivation, job and money.”<sup>109</sup> Leaver’s research leads her to assert that teacher-derived motivation has little self-reported effect on high-performance linguists.<sup>110</sup> Clausner and colleagues offer that less successful foreign language professionals cite being forced to study a certain language by an authority figure as inhibiting their development as linguists.<sup>111</sup> This result suggests the existence of “negative” extrinsic motivation, which had an opposite effect on language proficiency.

Ryan and Deci categorize motivation along a continuum, with intrinsic motivation lying on the right, amotivation lying on the left, and extrinsic motivation occupying a large area in the middle. From an organizational perspective, one would hope that linguists would develop what Ryan and Deci describe as Integrated Regulation,<sup>112</sup> which occurs when a linguist internalizes an organization’s goals, so that an extrinsic form of motivation approximates an intrinsic one. An example would be a

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<sup>105</sup> Leaver, “Motivation at Native-Like Levels of Foreign Language Proficiency,” 67.

<sup>106</sup> Leaver, “Motivation at Native-Like Levels of Foreign Language Proficiency,” 69.

<sup>107</sup> Clausner et al., *Pathways to Success: Comparison of Language Histories and Learning Experiences*, 3.

<sup>108</sup> Doughty and Kamide, *Pathways to High-level Success in Foreign Language Learning*, Executive Summary, 4.

<sup>109</sup> Leaver, “Motivation at Native-Like Levels of Foreign Language Proficiency,” 60.

<sup>110</sup> Leaver, “Motivation at Native-Like Levels of Foreign Language Proficiency,” 74.

<sup>111</sup> Clausner et al., *Pathways to Success: Comparison of Language Histories and Learning Experiences*, 3.

<sup>112</sup> Ryan and Deci, “Intrinsic and Extrinsic Motivation: Classic Definitions and New Directions,” 61–62.



linguist internalizing a desire to score 4 on the OPI, and thus working towards that goal autonomously. Instilling such motivation should be the goal of all linguist-related organizational programs, including language proficiency pay.

**b. Socio-Educational Model<sup>113</sup>**

Both Leaver and Doughty and Kamide analyzed their linguist populations utilizing the Socio-Educational Model,<sup>114</sup> which focuses on the goal of foreign language acquisition<sup>115</sup> and consists of both instrumental motivation and integrative motivation.

(1) Instrumental Motivation. Instrumental motivation is when “one is driven to learn by the desire to perform well on the job and create new job opportunities.”<sup>116</sup> Leaver reports that instrumental motivation played a dominant role in her population of high-proficiency linguists.<sup>117</sup> Foreign language proficiency pay may also play a role in instrumental motivation.

(2) Integrative Motivation. Integrative motivation is “the desire to fit into the community where the language is spoken [and] focuses on the language as a means to assimilation.”<sup>118</sup> In contrast to Leaver’s study, Doughty and Kamide found that integrative motivation was more prevalent than instrumental motivation amongst the linguists in their population.<sup>119</sup>

Whether conceptualized through the Intrinsic, Socio-Educational, or other models, the motivation required to learn a foreign language to a high level of proficiency

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<sup>113</sup> First proposed in Robert C. Gardner and Wallace E. Lambert, “Motivational Variables in Second-Language Acquisition,” in *Canadian Journal of Psychology* 13, no. 4 (December 1959): 267.

<sup>114</sup> Leaver in “Motivation at Native-Like Levels of Foreign Language Proficiency,” Doughty and Kamide in *Pathways to High-level Success in Foreign Language Learning*, and Mueller in “Tracing the Steps of a Successful Multilingual,” all delve-into the realm of instrumental and integrative motivation.

<sup>115</sup> Leaver, “Motivation at Native-Like Levels of Foreign Language Proficiency,” 59.

<sup>116</sup> Doughty and Kamide, *Pathways to High-level Success in Foreign Language Learning*, Volume 1, 28.

<sup>117</sup> Leaver, “Motivation at Native-Like Levels of Foreign Language Proficiency,” 74.

<sup>118</sup> Doughty and Kamide, *Pathways to High-level Success in Foreign Language Learning*, Volume 1, 27.

<sup>119</sup> Doughty and Kamide, *Pathways to High-level Success in Foreign Language Learning*, Volume 1, 27.

is substantial. Recognizing this now, more than ever, researchers continue to probe into the different types of motivation of high-performance linguists.<sup>120</sup>

## **C. ORGANIZATIONAL PRACTICES**

### **1. Assessment**

Organizations cannot adjust their hiring, training, and utilization practices without accurately assessing their linguists' ability to learn foreign languages, and their proficiency in those languages. In fact, the very concept of assessment of foreign language proficiency stemmed from a governmental need to properly match personnel with jobs that required foreign language proficiency.<sup>121</sup> There are three broad categories of language tests: Aptitude, Proficiency, and Diagnostic Assessment.

#### ***a. Language Aptitude Testing***

For organizations that select and train personnel in foreign languages, it makes sense to select those personnel with the greatest aptitude to learn foreign languages. The Department of Defense utilizes the Defense Language Aptitude Battery to determine trainees' language-learning aptitude, and also as a factor in language assignment. Superior achievement on this test has been shown to predict success in the Defense Language Institute's basic courses,<sup>122</sup> and certain minimum test scores thus serve as prerequisites for language-placement.<sup>123</sup>

The Center for Advanced Study of Language (CASL) is developing two potential replacements to the 1960s-era DLAB: DLAB-2 and HI-LAB (High-level Language Aptitude Battery). DLAB-2 is a modernized DLAB, incorporating advances in understanding of cognitive measures, personality traits, and motivation in foreign

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<sup>120</sup> See Leaver, "Motivation at Native-Like Levels of Foreign Language Proficiency," 59–82.

<sup>121</sup> Leaver and Shekhtman, "Principles and practices in teaching Superior-level language skills," 11.

<sup>122</sup> Annette C. Lee, "The Attrition Rate at DLI" (master's thesis, U.S. Naval Postgraduate School, 1990), 26.

<sup>123</sup> Annette C. Lee, "The Attrition Rate at DLI" (master's thesis, U.S. Naval Postgraduate School, 1990), 19–20.

language acquisition.<sup>124</sup> Like DLAB, DLAB-2 is meant to predict students' success in DLI's basic courses. HI-LAB, in contrast, is designed to predict adults' ability to learn foreign languages to high levels of proficiency. In theory, these two tests could together be used to predict success not only in the early stages of language acquisition, but also in the more advanced stages. Measuring both types of aptitude is important because research indicates that early success in foreign language acquisition may not necessarily correlate with later high-level achievement.<sup>125</sup>

***b. Language Proficiency Testing***

Although almost all U.S. government agencies employing linguists recognize the need to test, testing frequency and methods are not standardized. DoD uses the Defense Language Proficiency Test, which tests listening and reading, and the Oral Proficiency Interview, which tests speaking. The U.S. Department of State rates linguists based on speaking (through the OPI) and reading.<sup>126</sup> CBP primarily tests foreign-language proficiency through telephonic computer-based interviews which utilize voice recognition software, although it does also sometimes utilize the OPI, which is also employed by ICE.<sup>127</sup>

Cost complicates the testing process. Oral proficiency interviews, for instance, require a one-on-one interview with a trained examiner, and thus are comparatively more expensive than computer or web-based tests.<sup>128</sup> In addition, for some languages, no tests for proficiency levels above ILR Level 3 are available.<sup>129</sup>

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<sup>124</sup> Dr. Michael Bunting, "Improving DLAB's Prediction: New Ways to Identify Foreign Language Learning Potential," CASL Research Fact Sheet, University of Maryland Center for Advanced Study of Language, 15 APR 10, [http://www.casl.umd.edu/sites/default/files/fs\\_82114\\_201004\\_final.pdf](http://www.casl.umd.edu/sites/default/files/fs_82114_201004_final.pdf) (accessed 15 NOV 11).

<sup>125</sup> Leaver, *Achieving Native-Like Second Language Proficiency*, 23.

<sup>126</sup> GAO, GAO-09-955, 6.

<sup>127</sup> GAO, GAO-10-714, 20.

<sup>128</sup> Malone et al., "Attaining High Levels of Proficiency," 82.

<sup>129</sup> Malone et al., "Attaining High Levels of Proficiency," 79.

*c. Diagnostic Assessment*

Diagnostic Assessment differs from mere proficiency testing, in that it couples evaluation of language proficiency with analysis of preferred learning styles and the creation of individualized learning plans.<sup>130</sup> Unlike the other two forms of language testing, diagnostic assessment is proscriptive as well as descriptive. A majority of foreign-language instructors at Coalition for Distinguished Learning Centers (CDLC) institutions assert that diagnostic assessment is critical to helping students achieve native-like proficiency.<sup>131</sup>

Testing is an integral part of recruitment and linguist management. However, the modalities tested, tests employed, and frequency of testing is not standardized between U.S. government agencies. Furthermore, regular diagnostic assessment is needed at the organizational level to foster high-level language learning.

**2. Time on Task<sup>132</sup>**

Simply put, the longer one spends studying a language, the more likely one is to reach higher levels of proficiency. None of the research would refute this basic observation. Where the research diverges, however, is with regard to exactly what is necessary to achieve ILR level 3 and beyond.

Doughty and Kamide cite “Time on Task” as the number one success factor in attaining ILR Level 4, defining it as the “amount of time spent learning and using the foreign language.” Their second factor, “Creating a Speaking Environment,” implies that linguists are taking every available opportunity to improve their speaking, thus increasing time on task.

Malone and colleagues refer to a similar concept as Contact Hours. For a language like Russian, they state that a minimum of 1320 contact hours is necessary to

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<sup>130</sup> According to CDLC, diagnostic assessment is required to progress to high-level language learning. CDLC, *What Works: Helping Students Reach Native-Like Second Language Competence*, 9.

<sup>131</sup> CDLC, *What Works: Helping Students Reach Native-Like Second Language Competence*, 8.

<sup>132</sup> Doughty and Kamide, *Pathways to High-level Success in Foreign Language Learning*, Executive Summary, 2.

reach the Superior level (roughly analogous to ILR Level 3).<sup>133</sup> This figure would equate to 66 weeks at 4 contact hours per day, or 44 weeks at 6 contact hours per day. Malone and colleagues argue that 1320 Contact Hours is not possible in a college environment, however, and that college graduates are unlikely to reach ILR Level 3 through normal language training.<sup>134</sup>

Dougherty and Kamide's concept of "Time on Task" embraces more than just time spent in training. They found that linguists who took every available opportunity to increase the time they spent speaking and studying Russian—whether at in class, at work, or during their leisure time—reaped the benefits in terms of DLPT scores, and that this causal relationship held true from the outset of learning to attainment of ILR Level 4.<sup>135</sup> Leaver would add that, while important, time spent studying or using a foreign language needs to be at a sufficient level of sophistication in order to see improvements in DLPT scores.<sup>136</sup>

The literature would suggest that time spent on task is clearly important, but it is most beneficial at the appropriate level of sophistication. This knowledge can help organizations conceptualize how their members' regular use of foreign language may or may not facilitate improvements in their DLPT scores.

### **3. The Interaction of Modalities**

Three of the six studies suggested that focusing training on one modality might offer gains in another. The literature, however, is inconclusive on this subject. NSA linguists cited efforts to speak as improving their overall proficiency in their target languages<sup>137</sup> (likewise, Twist concluded that language practice which focused on

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<sup>133</sup> Foreign Service Institute Figures, Malone et al., "Attaining High Levels of Proficiency," 69.

<sup>134</sup> Data of actual Russian students presented by Brecht and colleagues confirms this observation.. Only 13% of college students who had completed four years of college Russian scored 2 or better on the OPI (Advanced level or better on ACTFL). Dr. Richard Brecht, Dan Davidson, and Ralph B. Ginsberg, "Predictors of Foreign Language Gain during Study Abroad," NFLC Occasional Papers (Washington, D.C.: National Foreign Language Center, 1993), 17.

<sup>135</sup> Doughty and Kamide, *Pathways to High-level Success in Foreign Language Learning*, Executive Summary, 2.

<sup>136</sup> Leaver, *Achieving Native-Like Second Language Proficiency*, 104.

<sup>137</sup> Doughty, Meyer, and Brecht, "The Making of a Cryptologic Language Analyst," 2.

speaking led to higher overall achievement levels).<sup>138</sup> And the success of a course of devoted specifically to speaking,<sup>139</sup> suggests that speaking may lead to improved proficiency in all modalities. Conversely, Leaver's participants reported that reading and writing contributed most to their speaking proficiency.<sup>140</sup> Thus, research and anecdotal evidence suggest that enhanced speaking proficiency translates to enhanced proficiency in reading and listening, and also that focusing on reading and listening proficiency improves speaking skills, at the very least implying that these modalities complement one another. More research is needed in this subject.

#### **4. Importance of Immersion Experiences**

It is a generally accepted principle of second language acquisition that “true functional competence” in a foreign language is only achieved by living in a culture where it is spoken.<sup>141</sup> All six studies either explicitly or implicitly cited immersion as vital in achieving high-level language performance. Linguists benefit from being immersed in the language and culture while living, studying, and working abroad, and also have benefited greatly from specific-designed “Isolation Immersion” programs within the U.S.

##### ***a. Study Abroad***

Study-abroad experiences fall into two distinct categories: structured study-abroad experiences and direct matriculated study abroad.

Structured study abroad experiences embrace a wide range of levels of immersion. While some programs require students to live on the economy, most offer gradations of such immersion, housing students in special dormitories, or offering “sheltered” courses of study in which participants are not taught alongside native

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<sup>138</sup> Dr. Alina Twist, “Expert Language Professionals: How did they attain their high-level foreign language skills?” CASL Research Fact Sheet, University of Maryland Center for Advanced Study of Language, 15 SEP 09, [http://www.casl.umd.edu/cites/default/files/TTO2126\\_FS\\_200912.pdf](http://www.casl.umd.edu/cites/default/files/TTO2126_FS_200912.pdf) (accessed 08 MAY 11), 1.

<sup>139</sup> The Russian Arms Control Speaking Proficiency Course.

<sup>140</sup> Leaver, *Achieving Native-Like Second Language Proficiency*, 121.

<sup>141</sup> Brecht, Davidson, and Ginsberg, “Predictors of Foreign Language Gain during Study Abroad,” 1.

speakers.<sup>142</sup> Like many foreign students studying in America, many American students simply lack the requisite language skills to matriculate directly into foreign classrooms.<sup>143</sup> Thus, structured study-abroad experiences are most appropriate for those linguists with a solid grounding in foreign language, but who are not yet able to participate at the collegiate-level classroom environment. Malone and colleagues suggest that study abroad is most important to progress from ILR Level 2 to ILR Level 3 and beyond.<sup>144</sup> Brecht and colleagues show that twice as many students scored at least 2 on the OPI in Russian after spending at least one semester abroad.<sup>145</sup>

Leaver's data indicates that direct matriculated study abroad is a consistent method of attaining ILR Level 4.<sup>146</sup> Of the over 50 respondents analyzed in her study, only three had participated in traditional study-abroad experiences. Strikingly, however, over 77% had taken degrees in a country which spoke their target language. In other words, three out of four ILR Level 4 speakers had matriculated in foreign universities as regular students at some point in their past, with their target language the language of instruction for other coursework.<sup>147</sup> Although Leaver's work focused on direct matriculation study abroad, she does not dispute the value of study abroad in general, and hypothesizes that timing is an important aspect, again focusing on ILR level 2 to 3.<sup>148</sup> Malone and colleagues do not distinguish between study-abroad and direct matriculation but do assert that the most successful programs treat students as similarly to native-speakers as possible.<sup>149</sup> Doughty and Kamide distinguish between the relative value of "rich" immersion experiences and traditional immersion experiences. In "rich" immersion experiences, students force themselves to speak the language and integrate

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<sup>142</sup> CDLC, *What Works: Helping Students Reach Native-Like Second Language Competence*, 88.

<sup>143</sup> CDLC, *What Works: Helping Students Reach Native-Like Second Language Competence*, 88.

<sup>144</sup> Malone et al., "Attaining High Levels of Proficiency," 71.

<sup>145</sup> Brecht, Davidson, and Ginsberg, *Predictors of Foreign Language Gain during Study Abroad*, 17.

<sup>146</sup> Perhaps Leaver's strongest argument to consistently attain ILR Level 4 is through direct matriculated study. This argument is based primarily on data, but supported by self-identified factors. Leaver, *Achieving Native-Like Second Language Proficiency*, 113.

<sup>147</sup> Leaver, *Achieving Native-Like Second Language Proficiency*, 111.

<sup>148</sup> Leaver, *Achieving Native-Like Second Language Proficiency*, 112.

<sup>149</sup> Malone et al., "Attaining High Levels of Proficiency," 75.

with local society.<sup>150</sup> In traditional immersion experiences, students may have the opportunity to associate with fellow English-speakers, and may not have the benefit of problem-solving and dealing with complicated scenarios in the target language, which are both activities which foster high-level learning.<sup>151</sup>

***b. Intensive Summer Programs***

There are immersion courses offered in the U.S. that are alternatives to study-abroad experiences. Middlebury College's intensive summer program,<sup>152</sup> perhaps the most well-known, is which offers seven or eight-week immersion courses in a variety of languages, including critical languages such as Chinese, Russian, and Arabic.<sup>153</sup> Middlebury's immersion experience is perhaps more total than any other (including study or work abroad experiences), as students are required to take a language pledge to speak no English during the course of the program.<sup>154</sup> Middlebury reports that nearly 30% of the students who enter the program with an intermediate level of proficiency (ILR Level 1) left with an advanced level of proficiency (ILR Level 2), improving by an entire level in only 8 to 9 weeks.<sup>155</sup>

***c. Professional Use of Language***

The isolation immersion model and direct matriculation model both suggest that using foreign language in contexts outside the traditional classroom environment causes the most profound jumps in language proficiency. Conducting

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<sup>150</sup> Rich immersion experiences are characterized by “forced exclusive use of the target language, exploiting the opportunities to develop personal and emotional relationships with the people and culture, and constant exposure to the language.” See Doughty and Kamide, *Pathways to High-level Success in Foreign Language Learning*, Volume 1, 25.

<sup>151</sup> Doughty and Kamide, *Pathways to High-level Success in Foreign Language Learning*, Volume 1, 22.

<sup>152</sup> Recommended by Malone and colleagues. See Malone et al., “Attaining High Levels of Proficiency,” 72.

<sup>153</sup> Middlebury College, “Program List,” <http://www.middlebury.edu/languages/programs> (accessed 22 MAY 11).

<sup>154</sup> Middlebury College, “The Language Pledge,” <http://www.middlebury.edu/languages/approach/pledge> (accessed 22 MAY 11).

<sup>155</sup> Malone et al., “Attaining High Levels of Proficiency,” 72.



everyday functions in the target language appears to assist the linguist in moving from ILR Levels 2 to 3. And using the target language in the more intellectual college and professional work environments seems to provide the necessary jump in language-level from ILR Levels 3 to 4. Indeed, Leaver's group reported the importance of regular, professional use of their language in the attainment of ILR Level 4.<sup>156</sup> Further, both of these models would also suggest that forced immersion could lead to higher levels of language proficiency.

In summary, while structured study abroad experiences seem best suited for progressing from ILR Levels 2 to 3, direct matriculation requires a higher level of capability prior to commencing studies, but is also instrumental in attaining Levels 3 and higher. And while daily use of the target language is instrumental for many speakers in attaining ILR Levels 2 to 3, professional and academic use of the language seems necessary to proceed beyond Level 3.

#### **D. CONCLUSION**

The characteristics of high proficiency linguists discussed in this chapter were chosen because they were represented in more than one of six studies on high-proficiency linguists. Analysis shows that motivation is the most important personal factor for high-level language learning, trumping even early exposure, which may aid in the lower levels of language acquisition, but had little bearing on overall achievement. Related to motivation is confidence, although its specific role in language acquisition is still unclear.

In terms of organizational practices, testing, time on task and immersion emerge as the most important factors. Not only is testing vital to the efficient employment of linguists, but regular diagnostic testing aids in high-level language achievement. Similarly, time on task, while important, is most beneficial if applied at the appropriate level of language-learning. And all things being equal, immersion is the most consistent method to achieve high-level proficiency, especially in the advanced levels of language acquisition. The interaction of the different modalities, and how it could affect the focus of language training, is still inconclusive.

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<sup>156</sup> Leaver, *Achieving Native-Like Second Language Proficiency*, 127.

Finally, this chapter was intended to summarize and synthesize the current academic discourse on high-level language learning to create a working list of critical factors. It is by no means comprehensive. A number of the six studies provided original insights into high-proficiency linguists which are worth mentioning. Some of these will be incorporated into original research on the Defense Threat Reduction Agency's interpreter program in the next chapter.

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### **III. CASE STUDY – DEFENSE THREAT REDUCTION AGENCY**

Among those who manage federal foreign-language programs, DTRA's program is widely hailed as the "Gold Standard." What is it about its program which deserves such praise—its organizational practices, its linguists, or both? This chapter presents a case study of DTRA's language program and linguists to identify the organizational practices and personal characteristics which have contributed to its success. Unlike the previous two chapters, which rely almost exclusively on secondary source materials, such as journal articles, governmental studies, and books, this chapter is based largely on primary source materials.<sup>157</sup>

#### **A. DTRA'S ON-SITE INSPECTION DIRECTORATE**

DTRA's On-Site Inspection Directorate (OS) performs a crucial Homeland Security function: verifying treaty compliance. Verified treaties include the New START treaty (NST), the Conventional Armed Forces in Europe Treaty (CFE), the Open Skies Treaty, the Plutonium Production Reactor Agreement, and the Cooperative Threat Reduction Program.<sup>158</sup> Unlike other DTRA directorates (and the federal government in general), the On-Site Directorate has historically trained enlisted military linguists as interpreters, rather than employing government or contract interpreters.<sup>159</sup> DTRA draws Russian linguists from three services—the Army, Navy, and Air Force—and trains them as Russian interpreters. Due to the Former Soviet Union-focus of most of the treaties which DTRA verifies, it maintains only Russian interpreters.

DTRA interpreters assigned to OS understand the specifics of treaties, function as interpreters during inspections, operate sensor equipment aboard aircraft, and serve as

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<sup>157</sup> A note on sources: when content is derived from instructional material, I will cite the document. When it is derived from figures given to me by staff from unpublished sources, I will cite it as such. Finally, apart from the opinion and personal experiences shared during interviews, I have included only factual information provided by DTRA staff.

<sup>158</sup> Defense Threat Reduction Agency, *Arms Control Treaties and Agreements*, iv-v.

<sup>159</sup> I interviewed "OS" interpreters assigned to the On-Site Inspection Directorate (OS) at DTRA. Other linguists and interpreters are assigned to other branches of DTRA (many of whom are civilian native and heritage speakers). Unless otherwise stated, for clarity and ease of reference, this chapter refers to OS interpreters simply as DTRA interpreters and linguists.

defacto cultural experts and logistics coordinators while on-mission. In addition, DTRA interpreters assist during treaty negotiations, work as interpreters on a rotating basis at U.S. Embassies abroad,<sup>160</sup> and conduct a variety of ad-hoc missions, such as interpreting during bilateral exercises or for VIPs such as ADM James G. Stavridis, NATO's Supreme Allied Commander in Europe.<sup>161</sup> These examples show that DTRA interpreters are capable of high-level political-military interpretation, have a variety of skill-sets in addition to interpreting, and in their field of expertise, are on-par with their civilian counterparts, all of which may explain why the program has survived for close to 25 years.

## **1. Operator/Interpreters**

I elected to study Defense Threat Reduction (DTRA) interpreters more closely because their skill-set appears to be precisely what other agencies desire in their own linguists.<sup>162</sup> While DTRA linguists primarily function as interpreters during compliance missions, they also serve as inspectors for treaty compliance,<sup>163</sup> accomplishing tasks such as counting warheads, missiles, and sensor equipment on aircraft. In addition, DTRA linguists operate sensors aboard aircraft and provide interpretation for American pilots operating in the Russian air traffic control system. Thus, while they first-and-foremost serve as interpreters, DTRA linguists are also operators.<sup>164</sup> Like FBI or Border Patrol

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<sup>160</sup> Defense Threat Reduction Agency, *Arms Control Treaties and Agreements*, 202.

<sup>161</sup> Interpretation conducted during a press conference in October of 2010 with Russian Chief of General Staff of the Armed Forces of Russia, Nikolay Yegorovich Makarov. Defense Threat Reduction Agency, *Arms Control Treaties and Agreements*, 202.

<sup>162</sup> One interpreter told a very compelling story about translating Russian instrument approach plates to be used by U.S. Air Force pilots. He was asked to translate Russian approach plates, but sent them to State Department translators for an "official" translation. When they were returned to DTRA, the translation was unintelligible—it clearly had been done by a translator with no knowledge of aircraft or flight procedures. When he returned them to State Department to be reworked, they, in turn, asked DTRA to complete the work. Given his training at the Garmisch Air Traffic Control course, the fact that he was a qualified pilot himself, and his experience conducting consecutive interpretation for U.S. pilots flying in Russian airspace, he was the perfect person for the job. In short, he was able to use his training, experience, and unique cultural expertise to do something that even "official" translators could not. This is a great example of the value of DTRA linguists, and the potential value of linguists in the War on Terror.

<sup>163</sup> Defense Threat Reduction Agency, *Arms Control Treaties and Agreements*, 8.

<sup>164</sup> Tasks taken both from the *Arms Control Treaties and Agreements* textbook and conversations with DTRA staff.

agents who also have linguistic skills, DTRA interpreters serve in both linguistic and functional capacities. While their language capability is generally not as broad as that of contract-interpreters,<sup>165</sup> the specialized focus of their work has enabled them to function within their field at levels commensurate to, or sometimes even better than those of their civilian counterparts.<sup>166</sup>

## **2. Interpreter Training**

The Defense Language Institute in Monterey, California, is responsible for training DTRA interpreters. OS maintains a satellite office at DLI, where new interpreters attend a 47-week course of instruction known as the Russian Arms Control Speaking Proficiency Course (RACSPC).<sup>167</sup> This course focuses on speaking, interpretation, and treaty-specific language.

### **a. RACSPC (*Russian Arms Control Speaking Proficiency Course*)**

DTRA hand-selects its linguists from among the best in the military. While RACSPC students were traditionally drawn from military crypto-linguists, the course recently opened to all military sub-specialties. As a result, classes now consist of a mixture of crypto-linguists, native, heritage, and “immersion” speakers (speakers who learned Russian while living abroad, such as Mormon missionaries).

RACSPC students receive instruction in small groups of about five to ten over three, four-month trimesters. The first trimester consists of a grammar review. The course originally did not include this review, but as the availability of exceptional Russian linguists decreased after the end of the Cold War, RACSPC added this review as a precursor to beginning inspector coursework. Recently, a two-week immersion

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<sup>165</sup> As one interpreter noted, it is generally accepted that interpreters should function at ILR Level 4 (near-native proficiency), which is above the level of most DTRA interpreters. DTRA interpreters often do not have the breadth of vocabulary and experience of a civilian professional interpreter. Thus, interpreters may have trouble with topics outside of arms control, such as sports, medicine, or poetry, for example. DTRA interpreters are sometimes assigned to support a “civilian Executive Interpreter.” Defense Threat Reduction Agency, *Arms Control Treaties and Agreements*, 176.

<sup>166</sup> Christopher A. Browning, “A Glimpse into the future...The Right Place at the Right Time—It’s No Accident,” in *Arms Control Treaties and Agreements*, Defense Threat Reduction Agency, 3.

<sup>167</sup> Defense Threat Reduction Agency, *Arms Control Treaties and Agreements*, viii.

experience in Kiev, Ukraine, was added to the course to enable students to practice their interpreting skills on daily outings throughout Kiev.

Part of the process of training linguists to become consecutive interpreters<sup>168</sup> is to have students memorize a number of key phrases to serve as “anchors” while interpreting,<sup>169</sup> such as “National Nuclear Risk Reduction Center (Russian NRRC)” and “I look forward to our continued successful cooperation.”<sup>170</sup> In addition, students work through a variety of arms-control speeches, with one student reading the speech in English, while the other interprets consecutively.<sup>171</sup>

In addition to practicing speech and interpretation, students also study a number of more obscure topics. For instance, in learning to interpret size and distance, students must learn to perform quick computations so that they can translate into culturally- recognized units. For instance, students are taught to translate a Russian’s reference to an object weighing one kilogram as “about two pounds.” In addition, RACSPC students participate in memory-enhancing drills and games.<sup>172</sup> In addition to completing RACSPC, linguists go through follow-on training specific to their assigned division, meet requirements for weekly in-house language training, and have the opportunity to participate in yearly immersion training.

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<sup>168</sup> A type of interpretation whereby the interpreter speaks after the principal is done speaking, usually accomplished by the principal pausing after a few sentences to allow the interpreter to speak. Such pauses distinguish consecutive interpretation from simultaneous interpretation, where the linguist interprets while the principal is actually speaking.

<sup>169</sup> Defense Threat Reduction Agency, *Arms Control Treaties and Agreements*, 2.

<sup>170</sup> Defense Threat Reduction Agency, *Arms Control Treaties and Agreements*, 28.

<sup>171</sup> Examples of such speeches include, “On behalf of my inspection team, I would like to congratulate you on the completion of yet another successful START Elimination,” and “By working together in the spirit of mutual respect and cooperation, we have eliminated yet another threat to our great nations.” See Defense Threat Reduction Agency, *Arms Control Treaties and Agreements*, 254.

<sup>172</sup> In one game called “Snowball,” an instructor reads a simple Russian word (based on a common theme, such as “greetings”) to each student, one after the next. Each student responds by repeating his or her word and the words given to each previous student. Up to ten words are read. Once ten is reached, each student then reverses the original order from memory. Once the reversal is complete, students then translate the words, and again proceed in both orders. According to the instructor, most people can only remember seven words. The goal for RACSPC graduates is ten.

***b. Weekly Training and Immersion***

While assigned to DTRA, interpreters who score 3/3/2+ and above must attend five hours of language instruction per week with one of DTRA's four full-time Russian instructors. Interpreters who score below 3/3/2+ must attend a minimum of seven hours of training per week. DTRA sets no limit on the maximum number of training hours, although preparation for missions often precludes interpreters from training for more than the minimum required hours. Training evolutions may include everything from grammar review to interpretation practice at the National Rifle Association Museum. As operations allow, DTRA interpreters must also have the opportunity to attend one immersion experience per year, such as a week-long Isolation Immersion near Dulles Airport, a two week stay in Kiev, Ukraine, or one of several programs in Moscow. One of these is the Advanced Consecutive Interpreters Course, which is run by Russian President Gorbachev's former interpreter and a retired DTRA interpreter. Students also have the option to attend courses such as the Air Traffic Control course in Garmisch, Germany, where students learn how to interpret for American pilots operating in Russian airspace. Finally, interpreters with sufficiently high scores are allowed to forgo yearly immersion training if they so desire.

**B. METHODOLOGY**

The goal of this thesis was to add to the growing body of research on high performance linguists conducted largely by the professionals at CDLC and CASL, detailed in Chapter II. I chose a methodology similar to that used in previous studies. I conducted semi-structured interviews with 17 DTRA interpreters in Monterey, CA, and Fort Belvoir, VA.<sup>173</sup> All participants, of which 12 were currently working as interpreters, and the remaining five as instructors or in leadership positions, volunteered to participate in the study. The interviews were conducted in-person in a semi-private room, recorded for reference, and lasted approximately one hour in length. During interviews, I took notes, and later reviewed the notes and recordings to produce 2–3 page summaries, which

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<sup>173</sup> I am a linguist myself who has scored up to ILR Level 3 in Russian and Korean, although never in all modalities.



included direct quotation. These summaries were later verified by the interviewees. Finally, from a comparison of these summaries, I derived common themes.

The conduct of the interview was guided by the use of a questionnaire developed with reference to Dougherty and Kamide's study of Department of State Foreign Language Professionals. In this study, Dougherty and Kamide analyzed 18 Foreign Language Professionals who had scored ILR 4/4 or higher in at least one language, and who were neither heritage nor native speakers.<sup>174</sup> I modified their questionnaire to reflect three differences in methodology. First, my study focused only on Russian speakers, and it included heritage and native speakers as well as trained linguists. Second, the interpreters I interviewed scored much lower on the DLPT than Dougherty and Kamide's and Leaver's populations.<sup>175</sup> The median DLPT score for the interpreters interviewed was around 2+/3/2+ or 3/2+/2+, as opposed to the level 4 of previous studies. Third, the nature of DTRA interpreters' work necessitated that I adjust some questions. DTRA linguists interpret during trips to the Former Soviet Union, or on escort missions in the United States, both typically lasting only one to two weeks, whereas the interpreters interviewed in previous studies work daily in their assigned fields.

Further, because DTRA interpreters are hand-picked by a recruiter, their selection criteria may skew my results. In an effort to control for this, I requested selection criteria from OS's Chief of Linguist Accession and Standards. DTRA applicants are screened for military and linguistic suitability.<sup>176</sup> In assessing applicants' military suitability, recruiters review applicants' fitness reports for evidence of leadership, bearing, and initiative, among other areas. To assess applicants' linguistic suitability, recruiters conduct an in-person or telephonic interview to evaluate the applicants' knowledge of Russian grammar, vocabulary level, speaking proficiency, and circumlocution (the ability to talk-around a topic when the specific vocabulary is not known). Applicants must exhibit enough desired traits that the recruiter believes that he or she will develop into a

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<sup>174</sup> Doughty and Kamide, *Pathways to High-level Success in Foreign Language Learning*, Executive Summary, 1.

<sup>175</sup> Leaver, *Achieving Native-Like Second Language Proficiency*, 6.

<sup>176</sup> E-mail from Chief, Linguist Accession and Standards, OSSSL, DTRA, 03 OCT 11.

successful DTRA interpreter. Ultimate selection decisions involve an element of subjectivity that cannot readily be quantified or controlled for. In light of the widely varied personal characteristics and histories of the interpreters studied, it seems unlikely that the selection criteria have influenced the following observations. Nevertheless, such potential cannot be completely eliminated.

### C. POPULATION

All 17 interpreters had been through RACSPC or On-Site Inspection Agency training ranging from one week, to the current 47-week program.<sup>177</sup> The overall level of education of interviewees was markedly lower than that in previous studies of Foreign Language Professionals.<sup>178</sup> The most common level of educational attainment was an associate's degree, typically obtained through the DLIFLC Associate of the Arts Degree Program.<sup>179</sup> Still, some linguists had only completed high school, while others had master's degrees. Current interpreters ranged in age from 24 to 39, with the mean and median age both being 33. This is markedly different from Doughty and Kamide's population, where linguists ranged from 37 to 69 years old.<sup>180</sup> Of the 17 linguists interviewed, only two were female. The service distribution was nearly equal: five Navy, six Air Force, and six Army linguists.

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<sup>177</sup> The On-Site Inspection Agency is the predecessor to the On-Site Directorate of DTRA. Nearly all interviewees went through the full 47-week program.

<sup>178</sup> In Doughty and Kamide's study, most FLPs had attained at least master's degrees, and six had completed doctorates. Doughty and Kamide, *Pathways to High-level Success in Foreign Language Learning*, Volume 1, 11.

<sup>179</sup> Defense Language Institute Foreign Language Center, "The DLIFLC Associate of Arts Degree Program General Information," [http://www.dliflc.edu/archive/documents/AA\\_Degree\\_General\\_Information\\_News2.pdf](http://www.dliflc.edu/archive/documents/AA_Degree_General_Information_News2.pdf) (accessed 12 OCT 11).

<sup>180</sup> Doughty and Kamide, *Pathways to High-level Success in Foreign Language Learning*, Volume 1, 11.

## D. OBSERVATIONS/ANALYSIS

### 1. Quantifiable Personal Characteristic

#### a. *No Correlation between DLAB and DLPT*

One might hypothesize that achievement on the DLAB would correlate to achievement on the DLPT. Yet, of the 17 linguists interviewed, there was no evident correlation between DLAB score and maximum achievement on the DLPT.<sup>181</sup> To the contrary, one of the highest-scoring linguists who had achieved 4/3+/3+ on the DLPT scored a relatively low 96 on the DLAB, while another scored a comparatively high 121 on the DLAB but recently saw his DLPT scores dip to 2+/3/2. Moreover, one of the 17 DTRA interpreters actually failed to meet the minimum required DLAB score. Placed in the Basic Course despite this discrepancy, he tested at 3/2+/2 upon completion, well-above the required 2/2/2 minimum.<sup>182</sup> The lack of correlation between DLAB and DLPT scores could be a reason why the Center for Advanced Language Studies is currently developing new aptitude tests.<sup>183</sup>

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<sup>181</sup> In Annette C. Lee's thesis, "The Attrition Rate at DLI," she found a positive correlation between attaining a minimum DLAB score, and the success rate of Russian Basic Course graduates. Her study confirmed a previous DLI Steering Committee's assertion that students with less than the minimum DLAB score were twice as likely to attrite from their course of instruction. A logical continuation of Annette Lee's argument would be that those who scored higher on the DLAB would attain a higher level of achievement with the language. The results of my study, however, contradict this hypothesis. See Lee, "The Attrition Rate at DLI," 19 and 26.

<sup>182</sup> It is unknown whether any of the 16 other interpreters tested lower than the minimum required level at completion of the Basic Course. I did not ask what linguists had scored upon completion of the Russian Basic Course. While some volunteered this information, others did not.

<sup>183</sup> Doughty, Dr. Catherine and Mr. Jared Linck. "Nearly Native Speakers: Test Aims to Predict Who Can Best Learn a Foreign Language," CASL Research Fact Sheet, University of Maryland Center for Advanced Study of Language, 15 SEP 10, [http://www.casl.umd.edu/cites/default/files/fs\\_2105\\_201009\\_v4.pdf](http://www.casl.umd.edu/cites/default/files/fs_2105_201009_v4.pdf) (accessed 21 MAY 11).

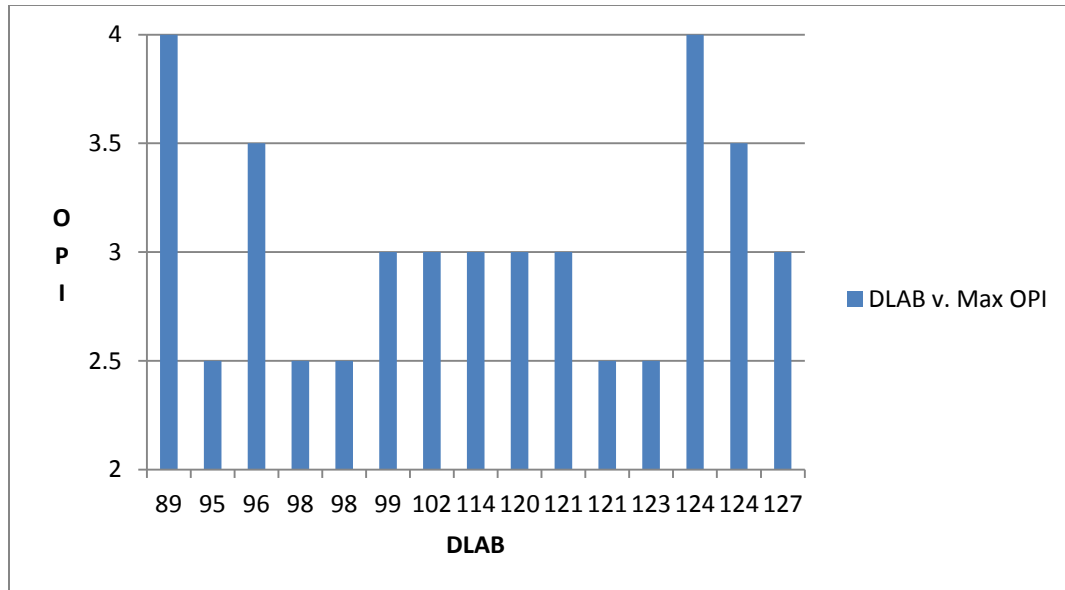


Table 1. DTRA Interpreter DLAB Scores Versus Maximum OPI Achievement

**b. Multilingualism/Early Exposure to Language**

One might hypothesize that learning multiple foreign languages would aid in language acquisition in general. The findings of this study, however, show no evident correlation between number of languages spoken, and achievement on the DLPT in Russian. One might also hypothesize that those who studied a foreign language prior to Russian may do better in Russian, or that any early exposure to a foreign language may help with language acquisition. Again, the data did not support this conclusion.<sup>184</sup> One of the most successful interpreters actually had never studied a foreign language prior to Russian, and another only had one semester of high school Spanish before the Russian Basic Course. This contrasts with Leaver's population, where nearly all high-level

<sup>184</sup> The distribution of foreign languages largely reflects the priorities of the military, and incentives to test based on proficiency pay. A number of interpreters tested in multiple Slavic languages, including Serbo-Croatian, Ukrainian, Bulgarian, and Czech. Most interpreters had studied Spanish, French, or German prior to attending the Russian Basic Course. In only a couple of cases did interpreters study non-Romance or Germanic languages prior to joining the military, with one studying Japanese, American Sign Language, and even Klingon, the constructed language spoken in the television series *Star Trek*. Finally, interpreters also trained in a number of central Asian and Asian languages once in the military, to including Turkmen, Uzbek, Korean, and Chinese. In contrast with Dougherty and Kamide's population, a number of interpreters spoke languages of different families at level 3 or above. This may be because military linguists are taught a variety of languages, often with no consideration for prior language training. Dougherty and Kamide, *Pathways to High-level Success in Foreign Language Learning*, Volume 1, 12.

linguists had studied multiple foreign languages prior to Russian.<sup>185</sup> The average number of foreign languages spoken, including Russian, was three. This is similar to Clausner and colleagues' population, where the average was four.<sup>186</sup>

While the fact that not all linguists were originally polyglots, or had exposure to foreign language as children, does not disprove that children may be more capable of learning languages, it does suggest that early exposure, and exposure to multiple languages, is not a prerequisite for high-level foreign language achievement.<sup>187</sup>

*c. Heritage and Native vs. Trained Linguists*

Of the population of 17 interpreters interviewed, three were either heritage or native speakers of Russian: one grew up in an ethnic Russian neighborhood in Latvia, another was raised in Lithuania and spoke Russian with friends, and a third lived in Ukraine until the age of six. All scored 3 or better on the OPI, with the Russian-American speaker having the highest scores of any interpreter interviewed, 4/4/4.<sup>188</sup> These three went through the RACSPC alongside trained linguists.

Conventional wisdom would suggest that native and heritage speakers would be more successful as interpreters than trained linguists. Two of three native or heritage interpreters scored above 3 in at least one modality, and were widely considered to be among the best interpreters at DTRA. Thus, this hypothesis was partially validated. Heritage and native speakers do not always outperform trained linguists as interpreters, however. For example, while at the RACSPC, I observed a class which included a heritage speaker who had trouble with the English unit of measurement "Quart," calling it, instead, a "Quarter." To address such challenges, DTRA offers supplementary English

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<sup>185</sup> Leaver, *Achieving Native-Like Second Language Proficiency*, 24.

<sup>186</sup> Clausner, et al., *Pathways to Success: Comparison of Language Histories and Learning Experiences*, 2.

<sup>187</sup> Knowledge of multiple foreign languages, however, may be one indicator of a linguist's intrinsic motivation, which is a key factor in the "above and beyond" discussed later.

<sup>188</sup> It is interesting to note that, even as an educated native speaker, this linguist was unable to score better than 4/4/4, which perhaps calls into question the efficacy of the tests.

instruction to native and heritage speakers. In addition, several trained linguists commented that heritage speakers provided valuable assistance with cultural issues and modern slang.

*d. Relationships with Foreigners*

One might think that involvement with a Russian-speaker romantically would lead to improved speaking. Of the four of interpreters who either were married to or had been involved in long-term relationships with Russian speakers, the average OPI was 3. This might suggest that dating or marrying a Russian speaker would lead to improved speaking.<sup>189</sup> There are more variables with the RACSPC interpreters, however, which need to be considered. For instance, two had spent considerable time working in Ukraine, thus obscuring a precise causal variable. Still, while it is impossible to completely separate the variables, the data suggests a correlation. Leaver's study opined that the level of language spoken at home for everyday tasks did not lead to high-level language acquisition.<sup>190</sup> My research suggests that it may, however, lead to OPI level 3.<sup>191</sup> More research is needed into the effects of "the language of love" on foreign language acquisition.

Finally, seven of 17 linguists (41%) were married to foreigners, most commonly, Germans. This is remarkably similar to Leaver's population of 54 linguists, where approximately 40% were married to foreigners.<sup>192</sup> The significance of this in terms of foreign language acquisition is unknown, but may serve as another valuable data point in determining propensity to go "Above and Beyond," discussed later.

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<sup>189</sup> Leaver's somewhat substantiated this hypothesis when she noted that those among her population who married to learn more about the language and culture "usually did experience an improvement in their foreign language proficiency." Leaver, *Achieving Native-like Second Language Proficiency*, 90.

<sup>190</sup> Leaver, *Achieving Native-Like Second Language Proficiency*, 130.

<sup>191</sup> One linguist felt that living with a native Russian speaker gave him the opportunity to learn obscure vocabulary he never had an opportunity to learn in a classroom setting, such as "take a bath, brush your teeth, don't splash water in your sister's face, etc."

<sup>192</sup> Leaver, "Motivation at Native-Like Levels of Foreign Language Proficiency," 70.

## 2. Behavioral/Cognitive Characteristics

### a. *Language “Choice” Had No Bearing on Achievement*

Generally, the services offer the candidates, at most, a restricted choice with regard to the languages they will study. Recent Army literature mentions that the DLAB “determines the level of difficulty for language training,” but does not indicate whether the Army considers linguist preferences when assigning languages.<sup>193</sup> In fact, a majority of Army DTRA interpreters contended that, in most cases, languages were assigned based solely on DLAB scores.<sup>194</sup> Thus, for Army interpreters, assignment to Russian “by choice” depended on luck or re-designation from another specialty. For interpreters from the other services, their placement in Russian depended on a mixture of the needs of their service, and their personal language preferences.

Conventional wisdom would suggest that a linguist will perform better in a language that they choose, vice one they are ordered to study. In keeping with this wisdom, Clausner and colleagues reported that being ordered to study a language was a common characteristic of less successful foreign language professionals, thus suggesting a correlation between language preference and performance.<sup>195</sup> Surprisingly, not all DTRA linguists originally “chose” Russian. Some were effectively forced to study Russian, but their DLPT scores did not differ markedly from those of their peers who had “chosen” Russian,<sup>196</sup> thus indicting that language assignment against preferences did not stop these linguists from achieving a high level of proficiency.<sup>197</sup>

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<sup>193</sup> U.S. Army, “Linguists,” [www.goarmy.com/linhuist/about/linguist.html](http://www.goarmy.com/linhuist/about/linguist.html) (accessed 12 OCT 11). Official policy is unknown. In all likelihood, such a decision is probably left to Army command leadership at the Defense Language Institute, meaning that it changes periodically.

<sup>194</sup> One interpreter described the process, stating that, “Well, the Army uses a very high-tech way of determining that. They lined us up in squads, and they said, you guys take Vietnamese, this squad takes Czech, these two squads are taking Russian...they lined us up by our abilities, by our DLAB scores, not that we knew that.”

<sup>195</sup> Clausner et al., *Pathways to Success: Comparison of Language Histories and Learning Experiences*, 2.

<sup>196</sup> A number of interpreters actually “fell in love” with Russian once they were directed to study it.

<sup>197</sup> One interpreter commented that while it took a while, she eventually learned to like Russian.

Moreover, allowing linguists to “choose” their languages may backfire, as well. An interpreter who experienced marked language atrophy in Chinese, for instance, actually chose Chinese over Russian, despite having considerable experience with Russian.<sup>198</sup> His experience of success in Russian and failure in Chinese is consistent with Leaver’s observation that individuals experience varying levels of success with different languages, and that success in one language may not lead to success in another.<sup>199</sup>

Analysis of the experiences of these 17 interpreters would indicate that while intrinsic motivation is often linked to language preference,<sup>200</sup> and assigning a linguist a language contrary to their preference could affect this intrinsic motivation, the simple act of assigning a linguist a language that they do not prefer does not eliminate the possibility that linguist will achieve a high level of success in the language.<sup>201</sup>

#### ***b. The Power of Negative Extrinsic Motivation***

Popular cognitive theory suggests that positive motivation yields better overall results than negative motivation—the carrot achieves more than the stick. Yet, the most commonly cited motivator throughout the interviews was a fear of failure. Without solicitation, four interpreters offered that they were motivated by a “fear of failure.” Interpreters were less forthcoming with examples of positive motivation, suggesting that negative motivation left a greater lasting impression.

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<sup>198</sup> Conversely, an Army interpreter was forced first to learn Korean over Russian, and did so begrudgingly, only to score marginally passing scores upon completion of the Korean Basic Course. This interpreter was actually a native-Russian speaker, who tried in vain to have the Army concede to his studying Russian. He commented that, “They kept me in school for a year, and they got a sub-standard (on a good day) Korean linguist, when they could have had an above-standard Russian linguist sooner.”

<sup>199</sup> Leaver, *Achieving Native-Like Second Language Proficiency*, 23.

<sup>200</sup> In one final example to illustrate this point, one interpreter was forced to learn Turkmen, and at the end of a nearly year-long course, scored only the equivalent of 1+/1+. At the end of the Russian Basic course (roughly the same length as the Turkmen course), the same interpreter tested at 3/3/2+.

<sup>201</sup> Thus, as Ryan and Deci might observe, those interpreters who have strongly integrated the need to perform in the military with their sense of self are able to motivate themselves to study languages for which they may have no intrinsic motivation, while others who have not integrated such a need to perform may never find internal motivation to perform in a language for which they have no intrinsic motivation. Ryan and Deci, “Intrinsic and Extrinsic Motivation: Classic Definitions and New Directions,” 62.



More powerful still were lingering memories of failure, which resulted in an inner drive to do better. One interpreter specifically commented that graduating in the bottom 10% of his class motivated him to strive to do better. Another linguist in his mid-thirties recalled his high school Spanish teacher telling him that he had no natural language aptitude.<sup>202</sup> A third linguist still grimaces at the thought of his low DLAB score, despite having one of the highest DLPT scores of all linguists interviewed (4/3+/3). The influence of negative motivation was similarly touched on by Leaver.<sup>203</sup>

Negative motivation did not push all interpreters to succeed, however. One interpreter, frustrated after years of seeing his ability in Chinese decline, became “embarrassed to speak Chinese.” Such frustration, coupled with a lack of recurrent training, and “no love for the Chinese language and culture,” contributed to language atrophy. Over the course of six years, his DLPT score declined from 2+ to 0+ in reading. For a number of interpreters interviewed, however, the prospect of failure proved strong motivation to improve language capability.

***c. Intrinsic Motivation: Going “Above and Beyond”<sup>204</sup>***

At their age, level of capability, and achievement, one might hypothesize that DTRA interpreters cultivated some strong sense of intrinsic motivation which lead to their success.<sup>205</sup> Supporting this hypothesis, nearly all interpreters cited intrinsic

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<sup>202</sup> The same interpreter now regularly scores 3/3, and last tested in speaking at level 3.

<sup>203</sup> Leaver, *Achieving Native-Like Second Language Proficiency*, 79.

<sup>204</sup> “Above and beyond” is linguistic proficiency above the required 2/2 minimum. One interpreter defined “above and beyond” as follows: “If you are...having a language shoved down your throat eight hours a day, there is going to be a certain amount of natural resistance to it, if you are not into it...and when you come home...you are going to half-ass your homework, you are going to do the minimum amount necessary just not to get in trouble...and pass, but if you are actually into the culture or curious about it and want to learn more about it...you are going to do more in your off time, you are going to surf the net and find those Russian movies or those Russian Youtube clips, or...get into Russian chatrooms, or something...maybe seek out Russian women if you are a guy, try the Russian food, go to the Russian Clubs...you have to like the language that you are learning.”

<sup>205</sup> Or Integrated Extrinsic motivation, to place this motivation properly within Ryan and Deci’s taxonomy. Ryan and Deci, “Intrinsic and Extrinsic Motivation: Classic Definitions and New Directions,” 61–62.

motivation as the most important factor in their language success.<sup>206</sup> It was evident, however, that this motivation often revolved around extrinsic factors, such as a desire to score 4, or to not be the worst, or resentment.<sup>207</sup> In addition, at least two interpreters reported being driven by the goal of becoming a DTRA interpreter. And while many linguists described periods when their interest had ebbed, most also had a love for the Russian language, at least at some point in their training. Two linguists study Russian for an hour every morning before even coming to work, shadowing Podcasts (reading recorded material aloud) or listening to different radio stations. Most read Russian-language literature, or watch Russian TV and movies on their own. Many have managed to maintain high-level language ability, despite working in non-language billets. Some also described a desire to sound more Russian, if not to be mistaken for a Russian, as well. In all cases, “Above and Beyond” required commitment beyond the office.<sup>208</sup> More senior interpreters seemed able to maintain required scores while spending less time studying at home. In contrast, junior interpreters who engaged in other activities, such as college classes at night, saw their scores slip.

As Leaver notes, intrinsic motivation is often composed of a number of elements which may not be readily identifiable.<sup>209</sup> And whether intrinsic motivation will drive one to study outside of work hours also appears to be an assumption on the part of most interpreters. Still, interviews with these 17 interpreters suggests that strong intrinsic motivation is necessary to achieve such a level of proficiency, and that success will inevitably require self-study.

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<sup>206</sup> This was the common usage of the word, which could more aptly be described as Integrated Extrinsic or Intrinsic motivation. Such a definition allows for the often-demonstrated desire for high scores, achievement, and capability. Ryan and Deci, “Intrinsic and Extrinsic Motivation: Classic Definitions and New Directions,” 61–62.

<sup>207</sup> Leaver also observed these characteristics among her population. Leaver, “Motivation at Native-Like Levels of Foreign Language Proficiency,” 67.

<sup>208</sup> I did not specifically ask questions related to self-confidence, although four interpreters displayed self-confidence bordering on arrogance. Still, others were naturally disinclined to overvalue their skills and could even be described as humble or shy. Such variety in personalities makes coming to a conclusion regarding self-confidence, and its role in language acquisition, impossible.

<sup>209</sup> Leaver even identified some high-proficiency Foreign Language Professionals who actually disliked their target language and culture, a finding which is similar to the previous section regarding language preferences. See Leaver, *Achieving Native-like Second Language Proficiency*, 80.

### **3. Training Observations**

#### ***a. The Value of Immersion – Quantifiable Observations***

One might hypothesize that those interpreters who had undergone more immersion-based training evolutions would score better on the OPI and DLPT. Most interviewed interpreters had undergone from one to five immersion experiences ranging in length from two days to six weeks. There appears to be no general correlation, however, between immersion experiences and maximum achievement on the DLPT or OPI, despite occasional evidence of improvement in DLPT scores upon returning from such training.

Instead, there does appear to be a correlation between total weeks spent in a Russian-speaking country, and maximum achievement on the OPI. Almost all interpreters with more than 28 weeks in-country scored a 3 or higher on the OPI.<sup>210</sup> Of the three interpreters who had less than 28 weeks in-country, all scored 2+s. This disparity would suggest that around six months of immersion are necessary to bring DTRA interpreters from the 2+ to 3 level.<sup>211</sup> This conclusion would align with Doughty and Kamide's observation that immersion is "an important element" in attaining ILR Level 4.<sup>212</sup>

#### ***b. The Value of Immersion – Interpreter Observations***

It is somewhat self-evident that immersion experiences are only as effective as students actually immerse themselves in language. This is consistent with both Doughty and Kamide<sup>213</sup> and Leaver's<sup>214</sup> observations that the quality of

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<sup>210</sup> Twelve out of 14 interpreters with 28 or more weeks in-country had scored a 3 on the OPI. One of the exceptions was an interpreter with considerable in-country experience, who actually speaks Russian at home with his family, who credited his recent drop from 3 to 2+ to over-confidence and not "gaming" the test.

<sup>211</sup> The data shows that nearly all of those with 28 weeks or more abroad scored level 3, but it does not show precisely when they first achieved that score. More specific research is needed to compare at precisely what length of immersion interpreters first tested at level 3.

<sup>212</sup> Doughty and Kamide, *Pathways to High-Level Success in Foreign Language Learning*, Volume 1, 14.

<sup>213</sup> Dought and Kamide call this "forced use of target language." Doughty and Kamide, *Pathways to High-Level Success in Foreign Language Learning*, Volume 1, 23.

immersion experience varies depending on the actual level of immersion provided, and also is consistent with interpreter observations. A number of interpreters felt that Isolation Immersion training done within the United States was more valuable linguistically than programs abroad. In one program, interpreters spend a week living together in a cabin with a Russian instructor and are forced to speak nothing but Russian. In contrast, a number of interpreters conceded that while on other “immersion” experiences overseas, students often reverted to English. From a cultural perspective, however, respondents felt that overseas experiences were superior to stateside ones, and especially hailed a new Advanced Consecutive Interpreter Course in Moscow.

This research suggests that self-imposed or mandated use of the Russian language, regardless of location, helps to improve linguists’ speaking proficiency. Given this observation, it is surprising how few of those interviewed use Russian in the work environment.<sup>215</sup> Dougherty and Kamide refer to this as “creating a Speaking Environment.”<sup>216</sup> Consistent with the experiences of interpreters who are married to Russian speakers, and those who have spent more time abroad, simply speaking Russian appears to have a positive impact on one’s speech, regardless of location or authenticity of use.

*c. Speaking As an Enabling Skill<sup>217</sup>*

As detailed in Chapter II, there is no academic consensus on the interaction between modalities; does speaking make one better at listening and reading, or vice versa? DTRA interpreters’ relatively high OPI scores and commensurately high

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<sup>214</sup> CDLC, *What Works: Helping Students Reach Native-Like Second Language Competence*, 87.

<sup>215</sup> Interpreters most often use Russian in the work environment when trying to keep their conversation from non Russian speakers, when discussing slang with heritage speakers, or sometimes when talking with language instructors. One interpreter commented that “People tend to revert to English, even our Russian speakers,” and added that “I would prefer to speak Russian all the time, of course, because if you are speaking all the time, you are always in that mode.” Thus, given other requirements, and the fact that some coworkers do not speak Russian, interpreters generally speak Russian only during their five mandated hours of training a week.

<sup>216</sup> Dougherty and Kamide, *Pathways to High-Level Success in Foreign Language Learning*, Executive Summary, 2.

<sup>217</sup> Twist, “Expert Language Professionals: How did they attain their high-level foreign language skills?” 1.

DLPT scores would indicate that RACSPC's and DTRA's emphasis on speaking contributes to success in reading and listening. After all, plenty of crypto-linguists can listen and read, but fewer can speak.

Despite a logical correlation, the data provided through the interviews only partially supports this hypothesis. Of 12 interpreters who scored 3 or better on their OPI, only one failed to score at least 3/3 on the DLPT, suggesting a strong correlation between speaking and reading and listening.<sup>218</sup> This data does not conclusively show, however, the actions which precipitated improvements in each modality. One interpreter contended that reading led to his improvement in speaking. Conversely, another maintained proficiency by "shadowing" podcasts (repeating what he heard out loud). Most interpreters utilized a combination of reading, listening, watching, and speaking, to maintain proficiency, in addition to attending DTRA's in-house training and immersion experiences.

In terms of quantifiable evidence, RACSPC graduates consistently outperformed graduates of the DLI's Intermediate *and* Advanced courses from 2008 to 2010. In 2010, for instance, 92% of the graduates of the RACSPC achieved 3/3/2 or better on the DLPT, compared to 71% of Advanced student, and 51% of Intermediate students.<sup>219</sup> This result is particularly impressive, given that DLI considers RACSPC an intermediate course. Undoubtedly, many variables contributed to this success, so it would be difficult, if not impossible, to point to any one as determinative or predominant. To be fair, students in the RACSPC are hand-picked for their potential to work as interpreters, and the 2011 student-instructor ratio was 13 instructors for 10 students. Still, the course's heavy emphasis on speaking could support Doherty, Meyer, and Brecht's observation that speaking leads to improvements in reading and listening.<sup>220</sup> More research is needed to further separate confounding variables.

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<sup>218</sup> The interpreter acknowledged that scoring lower in listening than speaking was uncommon, but couldn't identify a reason, opining that he had a problem with the actual listening test.

<sup>219</sup> This data reflects raw level of achievement, and does not account for variations in class-size, nor total number of linguists graduated. Data provided during my tour of the RACSPC.

<sup>220</sup> Doughty, Meyer, and Brecht, "The Making of a Cryptologic Language Analyst," 2.

<b>Hypothesis</b>	<b>Outcome</b>
1. DLAB achievement would correlate to DPT or OPI achievement.	<b>No evident correlation.</b>
2. Multilingualism would lead to higher maximum achievement.	<b>No evident correlation.</b> Most linguists eventually became polyglots, but many started with little foreign language experience.
3. Early exposure to language would aid in language achievement.	<b>Not supported.</b>
4. Heritage and Native speakers would make superior interpreters.	<b>Unresolved.</b> The heritage speakers did, on average, have higher OPIs than trained linguists. But the heritage and native speakers experienced challenges themselves, such as with English.
5. Romantic involvement with a Russian-speaker would lead to improved speaking scores on OPI.	<b>Supported.</b> Average OPI among four linguists was 3.
6. Language “Choice” would affect maximum level of achievement.	<b>No evident correlation.</b>
7. Positive extrinsic motivation would be more effective than negative extrinsic motivation.	<b>Not supported.</b> Negative extrinsic motivation proved most significant for linguists.
8. Intrinsic motivation would determine linguist success.	<b>Proven.</b> Intrinsic motivation (common usage) or Integrated Extrinsic Motivation, proved vital for high-level proficiency.
9. Those with more study-abroad or immersion experiences abroad would attain higher maximum language achievement.	<b>Disproven.</b> The number of short immersion experiences abroad, while occasionally helping DLPT scores improve, had no lasting effect on maximum language achievement.
10. Immersion would improve DLPT and OPI Scores	<b>Proven.</b> Almost all interpreters with more than 28 weeks in-country scored a 3 or higher on the OPI.
11. Immersion experiences abroad would be superior than those stateside.	<b>Unresolved.</b> Interpreter observation suggests this may not be the case—many interpreters reported that stateside immersion was actually more total.
12. Speaking is an enabling skill to other modalities.	<b>Unresolved.</b> There is some evidence this is the case, but determining causal variables is very difficult. More research is needed in this area.

Table 2. Summary of Hypotheses and Outcomes from Original Research

## **E. CONCLUSIONS**

An analysis of DTRA and its interpreters indicates that both organizational factors and personal characteristics contribute to its language program success.

### **1. Organizational Factors**

DTRA's four full-time language instructors and yearly immersion opportunities distinguish it from all other language programs. In addition to ample training opportunities, DTRA affords its interpreters the opportunity to immerse themselves in the Russian language through relevant work experience. Such combination of daily, weekly, and yearly training opportunities, and challenging work experience create an environment in which committed linguists can thrive.

Moreover, language is clearly the primary mission for DTRA interpreters. This focus distinguishes it from other agencies, where language is considered a useful, but not vital, complement to operators' primary functional skill-sets. To illustrate this point, if interpreters do not log their weekly five hours of training, they will be sought-out *in-person* by their Division Chief –a Colonel! This level of involvement of a high-ranking officer attests to DTRA's mission, and the vital nature of linguistic competence.

### **2. Personal Factors**

The data indicated a strong correlation between time immersed in a Russian-speaking environment, and scoring level 3 or higher on the OPI. In addition, quantitative data of the success of RACSPC suggested that speaking leads to improvement in other modalities, although more research is needed in this area. Perhaps most surprising about DTRA interpreters is that they were so varied in experience and background, complicating the process of identifying common attributes of successful linguists. All interpreters exhibited strong intrinsic motivation, enabling them to take advantage of the opportunities available at DTRA, but some still did better than others. Was this due to organizational issues or personal characteristics? Perhaps a bit of both, but the research suggests that at their level, those with the strongest and most consistent motivation will eventually prevail.

## **IV. A COMPARISON OF LINGUIST PROGRAMS**

While DTRA Russian interpreters verify treaty compliance, the diversity of homeland defense and security related missions demands that organizations employ foreign language capability in different ways. This chapter will examine the homeland defense and security related missions of four additional organizations and one federal language training initiative, describing how they utilize foreign language capability to further these missions, and evaluating their comparative effectiveness. It will show that training and management of personnel in foreign languages is not standardized across the federal government. Such lack of standardization has led to uneven success in the use of foreign language capability. While DTRA and NYPD's models have proven themselves resounding successes, other agencies, such as the Department of State, the FBI, and DHS, have experienced uneven success. This chapter will illustrate the variety of missions, lack of standardization, and successes and challenges of utilizing foreign language capability in the post-9/11 world.

### **A. DEPARTMENT OF STATE**

The Department of State serves a crucial Homeland Security role by adjudicating visa requests. Consular officers at embassies abroad review visa applications from host-country nationals, and in many cases, meet with applicants to conduct personal interviews.

As reported by the most recent Government Accountability Office report on foreign language capacity at the Department of State, as of the end of 2008, 31% of Foreign Service Officers overseas did not meet the proficiency requirements of their position.<sup>221</sup> In particular, about 40% of the FSOs in the Middle East and South and Central Asia failed to meet requirements.<sup>222</sup> GAO's most recent report describes six anecdotes of instances when insufficient foreign language skills left Consular Officers unprepared to make informed decisions regarding visa adjudication. GAO reported that

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<sup>221</sup> GAO, GAO-09-955, "What GAO Found" page.

<sup>222</sup> GAO, GAO-09-955, 10.



it consistently observed such problems created by foreign language shortfalls at seven posts since 2006.<sup>223</sup> In fact, other reporting indicates this has been a problem since at least 2004.<sup>224</sup> In one striking example from 2005, Department of State's Inspector General determined that the Department of State's ability to conduct the interviews "necessary for Homeland Security" at multiple posts in Arabic-speaking countries was limited.<sup>225</sup>

Ironically, when it comes to high-proficiency foreign language instruction, the Department of State literally wrote the book.<sup>226</sup> Basic language instruction for Foreign Service Officers occurs at the Foreign Service Institute, and FSI has a proven track record teaching all levels of proficiency, citing an 86% success rate in 2008.<sup>227</sup> In addition to basic courses, FSI offers high-level training.<sup>228</sup> In the late 1980s, FSI first introduced a course designed to bring Russia-bound diplomats to ILR Level 4. To enroll, students were required to test at ILR Level 3 or better, and have at least two years of in-country experience, thus illustrating the necessity of immersion in achieving high-proficiency.<sup>229</sup> Since then, FSI has periodically offered a number of courses designed to bring students to ILR Levels 3+ and 4 in Russian, French, Greek, and Polish.<sup>230</sup> FSI now offers an Arabic program in which students attend a 44 week course at FSI, followed by 44 weeks of

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<sup>223</sup> GAO, GAO-09-955, 3.

<sup>224</sup> GAO, GAO-09-955, 16.

<sup>225</sup> GAO, GAO-09-955, 14. While the exact level of proficiency necessary for each interview will vary, thesis research indicates that conducting an interview with a host-country national generally requires ILR Level 3 in speaking. A Consular Officer at ILR Level 2 will be able to question the individual, but may have problems understanding the full breadth of the individual's response, and certainly will not be able to pick up on nuances of language or culture which give deeper meaning. Anecdotal evidence supports this assertion, with some consular officers opining that 2/2 proficiency is insufficient for visa adjudication, and adding that host country nationals are used to help interpret when their language ability falls short. U.S. GAO, GAO-09-955, 18.

<sup>226</sup> In fact, Dr. Betty Lou Leaver, author of one of the six studies compared in Chapter II, was an FSI instructor. Leaver, *Achieving Native-Like Second Language Proficiency*, viii.

<sup>227</sup> GAO, GAO-09-955, 3. Note that this success rate reflects achievement of 2/2 (speaking/reading), and course completion. This number likely does not include those trainees who depart prior to course completion, which is actually fairly common.

<sup>228</sup> In more difficult languages, such as Arabic and Chinese ("superhard languages"), posts abroad provide high-level training, as well as recurrent training. See GAO, GAO-09-955, 7.

<sup>229</sup> Leaver, *Achieving Native-Like Second Language Proficiency*, ix.

<sup>230</sup> Ehrman, "Understanding the Learner at the Superior-Distinguished Threshold," 247.

additional training in an Arabic-speaking country. Once in-country, students continue to study full-time, and are involved in community-related programs to include immersion.<sup>231</sup> This class has seen considerable success, with students testing at 3/3 (Speaking/Reading) or better following course completion, perhaps validating the necessity of immersion and time-on-task for high-level achievement.<sup>232</sup>

While these examples show that FSI has long-standing success and interest in training FSOs to high levels of proficiency, even among FSOs, as illustrated by GAO's most recent statistics, it is common not to meet proficiency requirements, whether they are ILR Level 2 or ILR Level 3. What's more, there are very few positions which require near-native proficiency (ILR Level 4) because there simply aren't enough ILR Level 4 FSOs available to fill them.<sup>233</sup> Finally, "Beyond 3" classes are only offered on an ad-hoc basis,<sup>234</sup> and there is evidence that time spent in high-level language training may hurt an FSO's chances of promotion.<sup>235</sup>

In terms of language incentives, the Department of State offers hiring bonuses for demonstrated foreign language proficiency, as well as language proficiency pay of up to 10% of a FSO's base pay, annually.<sup>236</sup>

## **1. Broader Analysis**

While the Department of State's linguist training program through the Foreign Service Institute is very successful, it still has experienced linguist shortfalls since at least 2001.<sup>237</sup> The Foreign Service Institute's high-proficiency programs, such as its "Beyond 3" courses,<sup>238</sup> represent some of the most informed and cutting-edge approaches to high-level language instruction within the United States government, and cannot reasonably be

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<sup>231</sup> E-mail from FSI official, 09 NOV 11.

<sup>232</sup> E-mail from FSI official, 03 NOV 11.

<sup>233</sup> GAO, GAO-09-955, 17.

<sup>234</sup> GAO, GAO-09-955, 19.

<sup>235</sup> GAO, GAO-09-955, 24.

<sup>236</sup> GAO, GAO-09-955, 21.

<sup>237</sup> GAO, GAO-02-375, 9-10.

<sup>238</sup> Ehrman, "Understanding the Learner at the Superior-Distinguished Threshold," 247.

blamed for persistent organizational problems. To the contrary, FSI's language-training program is a model for other agencies to replicate. Nor can the shortfalls be attributed solely the heightened manning requirements of the War on Terror because they existed prior to 9/11.<sup>239</sup>

Rather, evidence suggests that the Department of State's culture and promotion system are to blame for persistent proficiency shortfalls. According to recent GAO reporting, high-level language training is a perceived career detractor. Foreign Service Officers have reported since 1986 that an organizational bias favors work at overseas posts over long-term language training, thus leading to the most capable Foreign Service Officers declining advanced language training.<sup>240</sup> Further confirming this observation, an internal audit of one promotion board found that those who were at overseas posts, vice long-term language training, were slightly favored to promote.<sup>241</sup>

In addition, comments by senior State officials that language shortfalls do not necessarily detract from mission effectiveness imply a permissive environment at the highest levels.<sup>242</sup> Simply put, the implied message from senior management has been that language training is not a priority. In fact, some 58% of Foreign Service Officers in management positions did not meet language requirements in 2008, compared to 16% in consular position, and 23% in public diplomacy positions.<sup>243</sup> That mid-level FSOs avoid high-level language learning to become more competitive to promote, while senior FSOs do not maintain foreign-language proficiency, suggests that high-level foreign language proficiency is less important to the Department of State than conventional wisdom would dictate.

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<sup>239</sup> GAO, GAO-02-375, 9-10.

<sup>240</sup> GAO, GAO-09-955, 24.

<sup>241</sup> According to GAO, this audit was not statistically relevant. GAO, GAO-09-955, 24.

<sup>242</sup> GAO, GAO-09-955, 13.

<sup>243</sup> GAO, GAO-09-955, 12.

Further reinforcing this conclusion, foreign language aptitude is not a selection criteria for Foreign Service Officers.<sup>244</sup> In contrast with the military, the Department of State has never used language aptitude tests as a discriminator in hiring new FSOs.<sup>245</sup> Department officials reportedly believe that it is easier to teach a FSO a language, than teach a linguist to be a FSO.<sup>246</sup> FSI has historically administered both aptitude and proficiency tests to newly-accepted FSOs, although last year the aptitude battery (MLAT) was removed entirely.<sup>247</sup> FSOs must demonstrate proficiency in at least one language to gain tenure.<sup>248</sup>

## **B. DHS PROGRAMS (CBP/ICE)**

The Department of Homeland Security, formed by consolidating 22 Executive-level organizations,<sup>249</sup> fulfills many homeland defense and security functions requiring foreign language proficiency. Officers and Agents at two of DHS's largest agencies, Customs and Border Protection (CBP) and Immigrations and Customs Enforcement (ICE), use foreign languages regularly in carrying out law enforcement and intelligence functions.<sup>250</sup> While CBP and ICE are subordinate to DHS, as of the most recent Government Accountability Office report on DHS's language capabilities (July 2010),

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<sup>244</sup> According to a 2002 GAO report, native speakers of foreign languages are not specifically "targeted" for FSO positions because foreign language proficiency is not the "primary criterion" in their selection. GAO, GAO-02-375, 18. Still, candidates with foreign language proficiency are given preference in hiring. U.S. Department of State, "Foreign Service Specialist: Selection Criteria," <http://careers.state.gov/specialist/selection-process> (accessed 06 NOV 11).

<sup>245</sup> E-mail correspondence with FSI Official, 03 NOV 11.

<sup>246</sup> GAO, GAO-09-955, 19.

<sup>247</sup> FSI has seen little correlation between achievement on the MLAT and final language achievement. Instead, FSI finds other factors critical, such as "interest in the language, hard work, willingness to use every opportunity to practice language skills," confirming observations through this thesis. E-mail correspondence with FSI Official, 03 NOV 11.

<sup>248</sup> U.S. Department of State, "Foreign Service Mentors, Re: Languages," <http://careers.state.gov/engage/forums/foreign-service-mentors/foreign-languages> (accessed 27 OCT 11)

<sup>249</sup> U.S. Department of Homeland Security, "Who Became Part of the Department?," [http://www.dhs.gov/xabout/history/editorial\\_0133.shtm](http://www.dhs.gov/xabout/history/editorial_0133.shtm) (accessed 28 OCT 11).

<sup>250</sup> I chose CBP and ICE because (1) they were studied in-depth by the most recent GAO report on DHS's language requirements (GAO-10-714), and (2) they serve as great examples of the breadth of foreign language requirements which are needed for homeland defense and security, and (3) their foreign language programs differ substantially from those of different agencies.

CBP and ICE operate their individual language programs separately from DHS.<sup>251</sup> This section will detail CBP and ICE's foreign language needs and programs. At a very basic level, both CBP and ICE focus almost exclusively on the Spanish language,<sup>252</sup> providing new recruits who will fill "officer"-like positions with one to two months of Spanish language instruction following academy completion, utilizing employees with foreign language proficiency on an ad-hoc basis, and using contract interpreting services as necessary. While both organizations apparently offer preference to applicants with pre-existing foreign language proficiency, neither offers formalized recurrent or advanced language instruction, and foreign language proficiency pay is unevenly applied.<sup>253</sup>

## **1. Customs and Border Protection (CBP)**

While Department of State visa adjudicators could be considered the first line of defense to keep foreign terrorists out of the United States, CBP could be considered the last. Simply put, CBP secures our borders.<sup>254</sup> CBP consists of three main subordinate organizations: the U.S. Border Patrol, Office of Field Operations, and Office of Air and Marine.<sup>255</sup> U.S. Border Patrol Agents patrol U.S. borders between ports of entry.<sup>256</sup> Office of Field Operations Customs Officers process personnel, vehicles, and cargo going through U.S. ports of entry. Finally, the Office of Air and Marine's Agents operate the

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<sup>251</sup> It is unknown to what extent DHS has incorporated recommendations from GAO's report by conducting a comprehensive department-wide assessment of foreign language needs, capabilities, and shortfalls, identifying whether current programs will address those shortfalls, and incorporating changes to insure that they are met in the future. GAO, GAO-10-714, "What GAO Recommends" page.

<sup>252</sup> GAO, GAO-10-714, 3.

<sup>253</sup> Foreign language proficiency pay is generally provided to those in investigative-type positions or higher. For instance, while Border Patrol Agents and Office of Detention and Removal officers do not receive proficiency pay, Customs Officers and Office of Investigations officers do. See chart at the end of this chapter.

<sup>254</sup> To be more precise, "5,000 miles of border with Canada, 1,900 miles of border with Mexico, and 95,000 miles of shoreline." U.S. Customs and Border Protection, "On a Typical Day in Fiscal Year 2010, CBP...", [http://www.cbp.gov/xp/cgov/about/accomplish/typical\\_day\\_fy2010.xml](http://www.cbp.gov/xp/cgov/about/accomplish/typical_day_fy2010.xml) (accessed 29 OCT 11).

<sup>255</sup> GAO, GAO-10-714, 5.

<sup>256</sup> "The primary mission of the Border Patrol is to protect our Nation by reducing the likelihood that dangerous people and capabilities enter the United States between the ports of entry," while "The priority mission of the Border Patrol is preventing terrorists and terrorists weapons, including weapons of mass destruction, from entering the United States." U.S. Customs and Border Protection, "Border Patrol Overview," [http://www.cbp.gov/xp/cgov/border\\_security/border\\_patrol/border\\_patrol\\_ohs/overview.xml](http://www.cbp.gov/xp/cgov/border_security/border_patrol/border_patrol_ohs/overview.xml) (accessed 28 OCT 11).

world's largest fleet of law enforcement aircraft and vessels to interdict smugglers, stop illegal border crossings, and prevent terrorist acts.<sup>257</sup> Employees in all three of these organizations utilize Spanish to detain, question, and arrest suspected criminals and non-documented immigrants. CBP's sheer size accounts for the enormity of the task of teaching new recruits Spanish, let alone other languages.<sup>258</sup> CBP consists of just over 20,000 Border Patrol agents, just over 20,000 Customs Officers, and over 1,000 Office of Air and Marine Agents, all of whom must have a baseline proficiency in Spanish.<sup>259</sup> With so many employees, CBP directs its language-training budget toward entry-level proficiency, probably out of necessity.

Considering over 90% of undocumented aliens apprehended each year speak only Spanish,<sup>260</sup> CBP's foreign language training and testing program focuses almost entirely on Spanish.<sup>261</sup> While each of the three CBP components has different Spanish language-training programs and requirements, the basic concept is that trainees who aren't fluent in Spanish will complete between four and eight weeks of task-based Spanish-language instruction following completion of basic training.<sup>262</sup>

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<sup>257</sup> U.S. Customs and Border Protection, "Office of Air and Marine Overview," [http://www.cbp.gov/xp/cgov/border\\_security/air\\_marine/cbp\\_air\\_marine\\_overview.xml](http://www.cbp.gov/xp/cgov/border_security/air_marine/cbp_air_marine_overview.xml) (accessed 28 OCT 11)

<sup>258</sup> Applicants with foreign language capability are given preference in hiring, Telephone interview with CBP official and follow-on e-mail, 11 OCT 11.

<sup>259</sup> U.S. Customs and Border Protection, "On a Typical Day in Fiscal Year 2010, CBP...", [http://www.cbp.gov/xp/cgov/about/accomplish/typical\\_day\\_fy2010.xml](http://www.cbp.gov/xp/cgov/about/accomplish/typical_day_fy2010.xml) (accessed 29 OCT 11).

<sup>260</sup> U.S. Customs and Border Protection, "CBP Border Patrol Academy," [http://www.cbp.gov/xp/cgov/careers/customs\\_careers/border\\_careers/cbp\\_bp\\_academy.xml](http://www.cbp.gov/xp/cgov/careers/customs_careers/border_careers/cbp_bp_academy.xml) (accessed 28 OCT 11).

<sup>261</sup> CBP officers assigned abroad, such as those participating in the Container Security Initiative, may receive up to 600 hours of language training for the country to which they are assigned. Some officers are required to have "advanced" proficiency, which could correlate to ILR Level 2. Homeland Security Committee, "Decision Eliminating Spanish and Other Language Training for ICE Investigators Was a Mistake," 28 JUL 05, <http://www.hsdl.org/?view&did=455077> (accessed 29 OCT 11), 7.

<sup>262</sup> U.S. Customs and Border Protection, "FAQs – Working for the Border Patrol," [http://www.cbp.gov/xp/cgov/careers/customs\\_careers/border\\_careers/bp\\_agent/faqs\\_working\\_for\\_the\\_usb\\_p.xml](http://www.cbp.gov/xp/cgov/careers/customs_careers/border_careers/bp_agent/faqs_working_for_the_usb_p.xml) (accessed 28 OCT 11); U.S. Customs and Border Protection, "CBP Border Patrol Academy," [http://www.cbp.gov/xp/cgov/careers/customs\\_careers/border\\_careers/cbp\\_bp\\_academy.xml](http://www.cbp.gov/xp/cgov/careers/customs_careers/border_careers/cbp_bp_academy.xml) (accessed 28 OCT 11); U.S. Customs and Border Protection, "Officer Fact Sheet," [http://www.cbp.gov/linkhandler/cgov/careers/customs\\_careers/officer/officer\\_fact\\_sheet.ctt/officer\\_fact\\_sheet.pdf](http://www.cbp.gov/linkhandler/cgov/careers/customs_careers/officer/officer_fact_sheet.ctt/officer_fact_sheet.pdf) (accessed 28 OCT 11); Telephone interview with CBP official and follow-on e-mail, 11 OCT 11.

Although CBP and ICE agents encounter numerous dialects,<sup>263</sup> neither agency provides dialect-specific follow-on training,<sup>264</sup> instead contracting with civilian interpreters to supplement in-house interpretation capability. CBP tests Border Patrol Agents at the seven and ten month mark to determine their oral proficiency in Spanish,<sup>265</sup> and failure of either of these tests can be considered grounds for removal.<sup>266</sup> This test is actually administered over a telephone with a computer which utilizes voice recognition software to judge respondent's choice of words, sentence structure and complexity, and correctness of answer.<sup>267</sup>

Because Spanish language capability is so fundamental to Border Patrol's mission, Border Patrol Agents do not receive language proficiency pay.<sup>268</sup> Based on their scores on the computerized test, Customs Officers can apply for proficiency pay, and may receive an annual bonus of up to 5% of their base pay.<sup>269</sup>

## **2. Immigrations and Customs Enforcement (ICE)**

Immigrations and Customs Enforcement is the "principal investigative arm of the U.S. Department of Homeland Security (DHS)." With over 20,000 employees in all 50 states and 47 foreign countries, it is also the second largest investigative organization in

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<sup>263</sup> "Such as Castilian, border, and slang Spanish," GAO, GAO-10-714, 13.

<sup>264</sup> Border Patrol's Spanish course teaches some regionally-specific vocabulary, GAO, GAO-10-714, 25.

<sup>265</sup> Homeland Security Committee, "Decision Eliminating Spanish and Other Language Training for ICE Investigators Was a Mistake," 7.

<sup>266</sup> The availability of remedial training is unknown, Customs and Border Protection, "FAQs-Working for the Border Patrol," [http://www.cbp.gov/xp/cgov/careers/customs\\_careers/border\\_careers/bp\\_agent/faqs\\_working\\_for\\_the\\_usb\\_p.xml#BasicTraining](http://www.cbp.gov/xp/cgov/careers/customs_careers/border_careers/bp_agent/faqs_working_for_the_usb_p.xml#BasicTraining) (accessed 08 NOV 11).

<sup>267</sup> Border Patrol Agents and Customs and Border Protection Officers assigned to the Office of Field Operations at the U.S. border with Mexico, and in Miami and Puerto Rico are tested in their Spanish language capability via a telephonic interview. Telephone interview with CBP official and follow-on e-mail, 11 OCT 11.

<sup>268</sup> GAO, GAO-10-714, 24.

<sup>269</sup> This is only done at the request of the officer, with the approval of his or her supervisors. The officer must demonstrate that the officer uses Spanish during the majority of the officer's workday to receive the language bonus. Telephone interview with CBP official and follow-on e-mail, 11 OCT 11.

the federal government.<sup>270</sup> Four elements within ICE regularly utilize foreign language capability: the office of Enforcement and Removal Operations (ERO),<sup>271</sup> the ICE Homeland Security Investigations Directorate (ICE-HSI) and its subordinate ICE Homeland Security Investigations Intelligence Office (HSI—Intel),<sup>272</sup> and International Affairs Office (IA).

ERO Officers operate the country’s civil immigration detention facilities, and interact regularly with people from “virtually every country in the world.”<sup>273</sup> These officers physically detain and move suspected undocumented immigrants, and are thus about as close to foreigners as any federal employee can get. ERO Officers receive five weeks of Spanish language training<sup>274</sup> following their basic training, and are rated using the ILR scale.<sup>275</sup> Similar to CBP Border Patrol Agents, ERO Officers are not paid language proficiency pay.<sup>276</sup>

All other ICE employees receive language training only when there is a clearly identified need, such as being stationed at one of seventy offices abroad. Other than its ERO Spanish language program, ICE provides no in-house language training. Employees who require foreign language proficiency train at the Foreign Service Institute, the Defense Language Institute, or other contract institutes. Thesis research indicates that ICE has few, if any, standing foreign language requirements for its stateside

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<sup>270</sup> U.S. Immigrations and Customs Enforcement, Overview, <http://www.ice.gov/about/overview/> (accessed 29 OCT 11).

<sup>271</sup> It appears that ICE has recently renamed its subordinate divisions. Enforcement and Removal Operations (ERO) appears to have replaced the Office of Detention and Removal Operations. The Office of Investigations appears to now be called the Homeland Security Investigations Directorate, and the Office of Intelligence appears to be the Homeland Security Investigations Intelligence Office.

<sup>272</sup> GAO, GAO-10-714, 11.

<sup>273</sup> U.S. Immigrations and Customs Enforcement, Detention Management, <http://www.ice.gov/detention-management/> (accessed 29 OCT 11).

<sup>274</sup> U.S. Immigrations and Customs Enforcement, “Immigration and Customs Enforcement Office of Detention and Removal Operations Spanish Language Training Program,” [http://www.ice.gov/doclib/about/offices/ero/pdf/spanishlangtraininginfo1\\_2.pdf](http://www.ice.gov/doclib/about/offices/ero/pdf/spanishlangtraininginfo1_2.pdf) (accessed 29 OCT 11).

<sup>275</sup> ICE, like CBP, uses the Federal Law Enforcement Training Center (FLETC) for its basic training (Despite having different course titles, all federal law enforcement training is now consolidated under FLETC). Spanish language instruction is not part of the “core” course taught at FLETC, however, and is offered as an add-on to the basic course of instruction. Telephonic interview with FLETC official, 11 OCT 11

<sup>276</sup> GAO, GAO-10-714, 23.



employees (other than for ERO Officers). Instead of training operators or employees in foreign languages, ICE meets its language requirements through the use of contract interpreters or linguists from other federal organizations.<sup>277</sup> Despite not receiving formalized language instruction, HSI Special Agents can still earn up to 5% of their base pay for demonstrated foreign language proficiency.<sup>278</sup>

Such a lack of standardized language training among its Special Agents, especially in Spanish, was not always the case with ICE. Up until 2003, ICE and one of its predecessor organizations, U.S. Immigration and Naturalization Service (INS), incorporated Spanish language training into basic training. In 2003, however, subsequent to INS's reorganization into DHS and the creation of ICE, ICE discontinued Spanish language training for its Special Agent recruits. A 2005 Congressional report criticized this decision:

A lack of language proficiency makes agents less able to debrief witnesses and informants, develop relationships in the criminal world, review documents for evidentiary purposes or to create leads, listen to court-approved wire-taps and contemporaneously understand recorded conversations. These limitations could reduce the chances of ICE agents successfully discovering or disrupting a terrorist threat.<sup>279</sup>

Somewhat ironically, in 1998, the Department of Justice Inspector General categorized INS's Spanish language instruction as "inadequate for meeting important language needs."<sup>280</sup> It would appear that ICE resolved this issue by eliminating the Spanish language training requirement entirely.

According to GAO reporting, ICE has never conducted a systematic language assessment,<sup>281</sup> relying instead on identifying its "needs based on daily activities."<sup>282</sup>

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<sup>277</sup> Telephonic interview with ICE official, 21 NOV 11.

<sup>278</sup> GAO, GAO-10-714, 23.

<sup>279</sup> U.S. Congress, "Decision Eliminating Spanish and Other Language Training for ICE Investigators Was a Mistake," 5.

<sup>280</sup> U.S. Congress, "Decision Eliminating Spanish and Other Language Training for ICE Investigators Was a Mistake," 3-4.

<sup>281</sup> GAO, GAO-10-714, 11.

<sup>282</sup> GAO, GAO 10-714, 13.

GAO reported that ICE employees generally “are aware” of who has foreign language proficiency,<sup>283</sup> and go to them as necessary, or use contract interpreting and translation services.<sup>284</sup> Further, GAO reported that individual ICE offices sometimes keep lists of personnel with foreign language proficiency.<sup>285</sup>

ICE employees are involved in a variety of homeland defense and security-related missions, from working with foreign authorities to intelligence gathering, apprehension of illegal or criminal aliens and operating immigration detention facilities across the nation.<sup>286</sup> Responding to GAO questions about the lack of an organized language program, ICE officials acknowledged that, as a result, information may not be translated, analyzed, or used to assist ongoing operations, thereby detracting from ICE’s ability to carry out those operations.<sup>287</sup>

### **3. Broader Analysis**

The disparity in foreign-language proficiency and aptitude testing, training, and incentive programs within ICE and CBP precludes any generalized conclusions. While GAO reporting has shown deficiencies in foreign-language training for CBP Border Patrol Agents and ICE Special Agents, Border Patrol’s widespread use of heritage and native Spanish speakers enables it to accomplish its mission along the Southwestern border, perhaps mitigating deficiencies in training. No available evidence, however, suggests that ICE is taking steps to mitigate training deficiencies or foreign-language proficiency shortfalls among its employees. Furthermore, of all foreign-language programs studied, ICE’s seems most lacking of a coherent plan to identify language requirements and address deficiencies.<sup>288</sup>

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<sup>283</sup> GAO, GAO-10-714, 17.

<sup>284</sup> GAO, GAO-10-714, 13.

<sup>285</sup> GAO, GAO-10-714, 16.

<sup>286</sup> U.S. Immigrations and Customs Enforcement, “Working for ICE,” <http://www.ice.gov/careers/occupations/work4ice.htm> (accessed 29 OCT 11).

<sup>287</sup> One example was given of an officer who, unable to communicate in Spanish to verify detainees’ immigration status, mistakenly let them go. GAO, GAO-10-714, 17.

<sup>288</sup> Analysis based primarily on GAO, GAO-10-714, 16–17.

At a broad level, this thesis has identified a significant disparity between the level of foreign-language training given to law enforcement officers, on the one hand, and to Special Agents, Foreign Service Officers, and other intelligence-related professionals, on the other. CBP Border Patrol Agents and ICE ERO Officers who come into contact with foreign nationals on a daily basis yet receive only four to eight weeks of foreign-language training, no recurrent training, and no proficiency pay, exemplify the irony of this disparity. CBP Customs Officers receive similar initial training to Border Patrol Agents and ERO Officers and have similar daily exposure to foreign nationals, while ICE-HSI Special Agents receive no initial Spanish-language training, and may or may not have regular interaction with foreign nationals. Unlike Border Patrol Agents and ERO Officers, CBP Customs Officers and ICE-HSI Special Agents who demonstrate regular use of a foreign language can receive up to 5% of their base salary for language proficiency.<sup>289</sup> In fact, the United States Code allows for such payments to all law enforcement officers. CBP and ICE simply do not extend such incentives to all eligible employees.<sup>290</sup>

The National Geographic Series, “Border Wars,” shows the prominent role that Spanish plays in CBP’s mission. This five-episode series from 2010 features heritage, native, and trained CBP personnel speaking Spanish with undocumented immigrants along the United States’ Southwestern border. While mostly native and heritage personnel are depicted conducting extensive questioning, a number of trained Spanish-speakers are also shown effectively questioning and detaining undocumented immigrants, suggesting that their Spanish is sufficient to conduct routine tasks. In one episode, Border Patrol Agents team with airborne Office of Air and Marine Aviation Enforcement Officers to locate a stranded group of undocumented immigrants in the Arizona desert. One Border Patrol Agent (speaking Spanish fluently with a member of the party on his cellular telephone) guides the helicopter to the immigrants. In an effort to apprehend the “Coyote,” or smuggler, who abandoned the group, the same agent later poses as one of

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<sup>289</sup> According to GAO reporting, such payment is authorized for law enforcement officers, which is extended to Customs Officers, 5 U.S.C.. 4521 et seq. GAO-10-714, 23.

<sup>290</sup> GAO, GAO-10-714, 24.

the group members on a cellular telephone left with the group by the “Coyote.” Such deception would only be possible with a fluent and native Spanish-speaker. The series repeatedly shows how valuable such personnel can be, especially when dispersed among personnel who are trained in Spanish, but lack deep linguistic and cultural understanding. Given Spanish’s prominent role in CBP’s mission, it is hard to imagine CBP operating without a cadre of fluent Spanish-speakers.<sup>291</sup>

Given CBP’s sheer size, the fact that it gives preference to heritage and native speakers in hiring, and it provides only minimal foreign language training to those without pre-existing proficiency is hardly surprising. I would estimate that CBP’s 4–8 week programs bring students’ proficiency to ILR Level 0+, or ILR Level 1 at best.<sup>292</sup> Since CBP does not rate Border Patrol Agents using the ILR scale, though, it is unknown what level of proficiency their current programs produce. CBP’s large size also explains its use of a computerized test employing voice recognition software.<sup>293</sup>

### **C. THE FEDERAL BUREAU OF INVESTIGATION (FBI)**

The mission of the FBI is to “protect the United States against terrorist and foreign intelligence threats, and to enforce the criminal laws of the United States.”<sup>294</sup> To fulfill this mission, the FBI employs Special Agents with foreign-language proficiency (Special Agent Linguists), and Directorate of Intelligence Language Analysts (linguist translator/interpreters) augmented by a substantial cadre of contract-linguists.<sup>295</sup>

The FBI’s staff of over 1,400 Language Analysts and contract interpreters translate documents, interpret verbal communications, and provide general cultural

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<sup>291</sup> National Geographic, *Border Wars*, “Last Defense,” Season 1, Episode 3, 2010.

<sup>292</sup> As a point of comparison, after a 16-week Dari course, over 50% of 60 paratroopers tested at ILR Level 1/1, and six tested at 1+/1+. While Dari is a much more difficult language for English-speakers to learn, 1–2 months of training cannot reasonably be expected to produce anything more than 1/1 proficiency, even in Spanish. Defense Language Institute Foreign Language Center, “Fury Brigade Graduates from First Dari Language Class,” 12 JUL 11, <http://www.dliflc.edu/news.aspx?id=85> (accessed 01 NOV 11).

<sup>293</sup> CBP is the only agency which utilizes this test. Its efficacy is unknown.

<sup>294</sup> Federal Bureau of Investigation, “Home: About Us: What We Investigate,” [http://www.fbi.gov/about-us/investigate/what\\_we\\_investigate](http://www.fbi.gov/about-us/investigate/what_we_investigate) (accessed 30 OCT 11).

<sup>295</sup> GAO, GAO-02–375, 18.

acumen.<sup>296</sup> These tasks include courtroom interpreting and working with victims of crime in the field. For example, one Language Analyst worked with the families of ethnic Russians who had been kidnapped and murdered in the Los Angeles area.<sup>297</sup> FBI Language Analysts even serve as consecutive interpreters during wire-tap (Title III) operations, providing invaluable, real-time situational awareness to Special Agents and personnel in the field.<sup>298</sup> Perhaps because Language Analysts have proven so valuable, since 9/11 the FBI has substantially increased their ranks, elevating the job of interpreter to “language analyst,” creating a viable and competitive career path, and establishing a “translation and interpreting training center.”<sup>299</sup> Beyond linguists’ proven value, these changes were undoubtedly motivated by the 9/11 Report, which criticized the FBI for failing to “dedicate sufficient resources to the surveillance and translation needs of counter-terrorism agents,” and for “lack[ing] sufficient translators proficient in Arabic and other key languages, resulting in a significant backlog of untranslated intercepts.”<sup>300</sup> Since 9/11, the FBI has devoted the majority of its language-related efforts to correcting this deficiency.<sup>301</sup>

Most Special Agent Linguists join the FBI with pre-existing foreign-language proficiency.<sup>302</sup> Special Agent Linguists use their foreign-language proficiency during the normal course of duties, in tasks such as interviewing suspects or developing

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<sup>296</sup> Federal Bureau of Investigation, “Language Services,” <http://www.fbi.gov/about-us/ten-years-after-the-fbi-since-9-11/just-the-facts-1/language-services> (accessed 29 OCT 11).

<sup>297</sup> Doughty et al., *Becoming an Expert FBI Interpreter*, 10.

<sup>298</sup> Doughty et al., *Becoming an Expert FBI Interpreter*, 5.

<sup>299</sup> Federal Bureau of Investigation, “Language Services,” <http://www.fbi.gov/about-us/ten-years-after-the-fbi-since-9-11/just-the-facts-1/language-services> (accessed 30 OCT 11).

<sup>300</sup> The National Commission of Terrorist Attacks Upon the United States, *The 9/11 Commission Report*, 77.

<sup>301</sup> Two Department of Justice Office of the Inspector General Audits have shown substantial improvement in the FBI’s translation and interpretation of foreign language materials since 9/11. See DOJ OIG Audit Reports 04–25 and 10–02.

<sup>302</sup> The extent to which FBI Special Agents are trained by the FBI in foreign languages is not publicly available. Of the 52 FBI employees who attended FSI from FY 2009–2010, some were probably Special Agents. Federal Bureau of Investigation, “Language Services,” <http://www.fbi.gov/about-us/ten-years-after-the-fbi-since-9-11/just-the-facts-1/language-services> (accessed 29 OCT 11). In addition, the FBI reported to GAO in 2002 that “many” Special Agents with no language capability were being trained in a foreign language (GAO, GAO-02–375, 12). The FBI considers detailed numbers regarding its Special Agents’ foreign language proficiency classified (GAO, GAO-02–375, 6).

informants.<sup>303</sup> Currently, about 12% of Special Agents have demonstrated limited working proficiency or better in a foreign language (ILR Level 2 or better).<sup>304</sup> Perhaps echoing CBP and ICE Officers' frustrations, however, Los Angeles FBI Special Agents commented to GAO officials that there was a "critical need" for more Spanish language capability in order to penetrate local gangs.<sup>305</sup> And the media has criticized the FBI for having only 40 Special Agents who demonstrated limited working proficiency in Arabic (ILR Level 2 or above).<sup>306</sup> A former Arabic-speaking FBI Special Agent even filed a racial discrimination law suit against the FBI, saying that he was unjustly pulled from the 9/11 case because of his ethnicity.<sup>307</sup>

The FBI partners with the Department of State to train some of its personnel in foreign languages. From FY 2009 to 2010, 52 FBI employees trained at the Foreign Service Institute. In addition, in FY 2010, 2665 FBI employees received language training, cultural awareness, or self-study materials for 45 languages through the FBI's foreign language program.<sup>308</sup> In 2010 the FBI established a language incentive program "to recognize FBI employees for substantial use and/or maintenance of languages critical to the FBI's mission."<sup>309</sup> In addition, as with CBP and ICE, select Special Agents

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<sup>303</sup> GAO, GAO-02-375, 12.

<sup>304</sup> Federal Bureau of Investigation, "Language Services," <http://www.fbi.gov/about-us/ten-years-after-the-fbi-since-9-11/just-the-facts-1/language-services> (accessed 29 OCT 11).

<sup>305</sup> GAO, GAO-02-375, 14.

<sup>306</sup> Ayad, "Speaking Arabic, other Eastern Languages, is High on FBI's Wish List."

<sup>307</sup> David Johnston, "FBI is Accused of Bias by Arab-American Agent," *The New York Times*, 20 JUL 03, <http://www.nytimes.com/2003/07/20/us/fbi-is-accused-of-bias-by-arab-american-agent.html?pagewanted=all&src=pm> (accessed 30 OCT 11).

<sup>308</sup> It is unknown how many FBI Intelligence Analysts have foreign-language proficiency or receive proficiency pay, although the move to increase foreign language bonuses in 2010 was probably to bring the FBI's language program in line with the other members of the intelligence community, who pay proficiency pay to their intelligence analysts. Federal Bureau of Investigation, "Language Services," <http://www.fbi.gov/about-us/ten-years-after-the-fbi-since-9-11/just-the-facts-1/language-services> (accessed 29 OCT 11).

<sup>309</sup> FBI, Language Services, <http://www.fbi.gov/about-us/ten-years-after-the-fbi-since-9-11/just-the-facts-1/language-services> (accessed 29 OCT 11).

receive as much as 5% of the base salary if they demonstrate proficiency and use of certain foreign languages.<sup>310</sup> Finally, applicants with demonstrated foreign-language proficiency are given preference in hiring.<sup>311</sup>

## **1. Broader Analysis**

Of all federal agencies analyzed, only the FBI has successfully implemented GAO-recommended strategic workforce planning for its linguist management. Moreover, the FBI has experienced considerable success in filling translation and interpretation gaps identified by the 9/11 Report using this model.

The FBI's success can be attributed primarily to its hiring of professional interpreters, many of whom started with the FBI first as contract interpreters. These personnel already had the requisite language proficiency, which fact has been fundamental to the FBI's success. In comparison, the FBI has been relatively unsuccessful in expanding its pool of Special Agent Linguists since 9/11. The percentage of Special Agents with at least ILR Level 2 proficiency remained nearly unchanged since 2001, at only 11.8%.<sup>312</sup> This consistency could indicate that the FBI consciously aims for a metric of around 12% in terms of manning, although according to a 2002 GAO report, the FBI does not set a staffing goal for such positions.<sup>313</sup>

In addition, the work of a Special Agent Linguist resembles that of a State Department Consular Officer: both need the ability to question in a foreign language and

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<sup>310</sup> GAO, GAO-02-375, 18.

<sup>311</sup> GAO, GAO-02-375, 47.

<sup>312</sup> In 2001, 1,301 Special Agent Linguists (GAO-02-375, 12) scored ILR Level 2 or better out of 11,028 total Special Agents (Transactional Records Access Clearinghouse, "FBI Staffing Trends, FY1986–2006," TRACFBI, National Profile and Enforcement Trends Over Time, <http://trac.syr.edu/tracfb/newfindings/v05/include/20yearstaffingtable.html> (accessed 15 NOV 11)). This represents 11.79%. In 2011, 1,634 Special Agent Linguists (FBI, "Language Services," <http://www.fbi.gov/about-us/ten-years-after-the-fbi-since-9-11/just-the-facts-1/language-services>) scored ILR Level 2 or better out of 13,900 total Special Agents (FBI, "Quick Facts," <http://www.fbi.gov/about-us/quick-facts>). This represents 11.76%.

<sup>313</sup> GAO, GAO-02-375, 12.

to understand responses across a broad spectrum. Given this similarity, ILR Level 2+/3 in speaking would seem to be an appropriate level of proficiency for FBI Special Agent Linguists.

The strategic workforce guidance has proven useful for an organization like the FBI, which has not effectively managed its linguist programs in the past. But generic human resources solutions alone will not solve the endemic problem of improving operator/linguist proficiency. Best practices in building high-proficiency linguists must inform human resources solutions. DTRA's success testifies to this basic premise.

#### **D. THE NEW YORK POLICE DEPARTMENT (NYPD)**

Since 9/11, the New York Police Department (NYPD) has adopted aggressive measures to police New York and its surrounding environs from a homeland defense and security perspective.<sup>314</sup> NYPD has created counterterrorism and intelligence units, populating their ranks with heritage and native speakers of critical languages such as Arabic, Persian, and Urdu, and then used these ethnic-minority officers to penetrate the city's radical elements.<sup>315</sup> NYPD draws from its own population; New York City is the largest<sup>316</sup> and perhaps most ethnically diverse city in the United States. Contemporary use of ethnic minority officers is not without precedent—since the early 20<sup>th</sup> Century, the New York Police Department has led the way in employing ethnic minorities to police its

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<sup>314</sup> “The Department enforces the law, protects lives and property, maintains peace, reduces fear, and maintains order.” In addition, NYPD “provides counterterrorism protection for the City.” NYPD, *NYPD Language Access Plan*, 1–2.

<sup>315</sup> Dickey, *Securing the City: Inside America's Best Counterterror Force—the NYPD*, 141.

<sup>316</sup> U.S. Census Bureau, “2010 Census Data,” <http://2010.census.gov/2010census/index.php> (accessed 16 SEP 11).



many diaspora communities.<sup>317</sup> While adding ethnic minorities within its ranks has caused NYPD its fair share of growing pains, NYPD and other units' successes in ethnic minority policing have prompted the U.S. Department of Justice to recommend racial diversification in law enforcement as a means to develop trust between the citizenry and police and thereby further legitimize police authority.<sup>318</sup>

Since 9/11, NYPD officers have garnered repeated praise for their cultural knowledge and linguistic competence as veritable weapons in the War on Terror. One ethnic minority officer, a young Bangladeshi and Muslim-American named Kamil Pasha,<sup>319</sup> was a 23-year-old naturalized citizen when he enrolled in NYPD's police academy. In 2002, NYPD pulled him from training early to become an undercover officer, having minimal contact with other officers. Pasha's appearance and faith gave him entrée to the world of Islamic extremism. In one of NYPD's more widely-covered successes, Pasha succeeded in uncovering the Washington Square subway bombing plot.<sup>320</sup>

In addition to ethnic-minority officers posing as extremists, NYPD also employs linguists in its new Cyber Intelligence Unit. In this unit, NYPD police officers raised in countries like Afghanistan,<sup>321</sup> Iran, and Egypt<sup>322</sup> penetrate extremist groups online, looking for potential threats to the city of New York. And according to a 2005 article in

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<sup>317</sup> As early back as 1907, *New York Times* reporting indicated that NYPD valued officers who possessed unique cultural or linguistic capabilities, running a public-interest piece about an officer who spoke 14 languages ("Talks Fourteen Tongues," *New York Times*, 09 JUN 07), and as early as 1909, the *Times* reported on the value of Italian-American police officers in a city with "more Italians than Rome itself" ("Petrosino a Terror to Criminal Bands," *New York Times*, 14 MAR 09). But this diversification only extended as far as police officers of European descent, such as Irish, Italians, and Jews. The Borough of Manhattan, for instance, did not see its first African-American police officer until 1911 (James Lardner and Thomas Repetto, *NYPD: A City and Its Police* (New York, Henry Holt & Company, LLC, 2000), 140). While it is unknown exactly when NYPD swore-in its first Asian-American police officer, available evidence would suggest it wasn't probably until the late 1970s (Ko-Lin Chin, *Chinatown Gangs: Extortion, Enterprise, and Ethnicity* (New York: Oxford University Press, 1996), 165). Now more forward-leaning than ever, in 2005, NYPD Police Commissioner Ray Kelly openly invited Muslims to take the police exam (Finnegan, "The Terrorism Beat," 11).

<sup>318</sup> Ronald Weitzer, "Can the police be reformed?" *Contexts* 4, no. 3(Summer 2005): 22–23.

<sup>319</sup> "Kamil Pasha" is a pseudonym. Dickey, *Securing the City*, 187.

<sup>320</sup> Dickey, *Securing the City: Inside America's Best Counterterrorism Force—the NYPD*, 187.

<sup>321</sup> Dickey, *Securing the City: Inside America's Best Counterterrorism Force—the NYPD*, 144–145.

<sup>322</sup> Finnegan, "The Terrorism Beat," 6.

*The New Yorker*, it has developed a unique ability to do so, as evidenced by a CIA request for assistance in learning how to navigate extremist chat rooms.<sup>323</sup> NYPD's success in employing ethnic minority officers has extended beyond those ethnicities typically associated with the War on Terror; NYPD employs nearly 200 Russian-speaking officers, for example.<sup>324</sup> According to Commissioner Ray Kelly, such diversity "helps us with community relations. It helps us, obviously, in doing investigations where language skills are important. It just makes sense for us to try to reflect this very, very diverse population that we police."<sup>325</sup>

NYPD conducts all necessary translation and interpretation exclusively through the use of departmental employees with pre-existing foreign-language capability (through its Language Initiative Program).<sup>326</sup> Departmental employees translate and verify all public service posters and pamphlets.<sup>327</sup> Certified and non-certified departmental employees provide nearly all interpretation services.<sup>328</sup> The department also uses "in-house" Spanish and Chinese-speaking 911 operators.<sup>329</sup>

NYPD screens its interpreters and translators from among its nearly 50,000 employees.<sup>330</sup> Unlike federal agencies, NYPD provides no initial or recurrent foreign-language training for its employees. Even NYPD officers stationed overseas do not receive language training.<sup>331</sup> Employees with proficiency in needed languages are screened and then tested by one of two private contractors. Those employees who score a

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<sup>323</sup> Finnegan, "The Terrorism Beat," 2–3.

<sup>324</sup> Marina Pariah, "Russian Cops on the Beat in New York," video, *Russia Today*, 08 JAN 08, <http://www.youtube.com/watch?v=BaXwH5jEWbl> (accessed 11 SEP 11).

<sup>325</sup> Pariah, "Russian Cops on the Beat in New York."

<sup>326</sup> NYPD, *NYPD Language Access Plan*, 6.

<sup>327</sup> NYPD, *NYPD Language Access Plan*, 11.

<sup>328</sup> Except through the Language Line or members of the community, as necessary. The Language Line is telephonic interpretation service which provides interpretation services in over 170 languages for 911 calls and extremist-situations where Departmental interpreters are unavailable. The decision whether to use a departmental interpreter or the Language Line is left to the senior on-scene officer. NYPD, *NYPD Language Access Plan*, 2, 6, 7–8.

<sup>329</sup> NYPD, *NYPD Language Access Plan*, 4.

<sup>330</sup> Dickey, *Securing the City: Inside America's Best Counterterrorism Force—the NYPD*, 37.

<sup>331</sup> They are, however, given cultural awareness training. Telephone conversation with NYPD official, October 10, 2011.

6 or better (out of 10) in listening, reading, and speaking, are considered “certified” interpreters and translators.<sup>332</sup> Those who do not may still be utilized if necessary.<sup>333</sup> While NYPD does not pay its linguists “proficiency pay,” per say, they do earn Career Points, which help in promotion as well as in obtaining preferred assignments. Currently, NYPD has over 850 employees qualified in over 65 languages,<sup>334</sup> and un-certified capability in well over 100 languages.<sup>335</sup>

## **1. Broader Analysis**

Although NYPD does not conduct initial or recurrent language training, or pay proficiency pay, it has one of the most successful linguist programs in the United States, if not *the* most successful. By drawing its linguists almost exclusively from its own ranks, the NYPD model differs fundamentally from all other government language programs.

NYPD’s foreign language program operates on the assumption that employees will maintain their foreign language proficiency on their own, and implicit in this is that they will have the intrinsic motivation necessary to do so. By offering “points” to certified linguists, NYPD has created a form of extrinsic motivation. Even absent this motivator, however, NYPD’s heritage and native linguists would probably use their foreign-language proficiency regularly, both on the job when interacting with New York’s diverse population, and at home when interacting with family members. Proficiency-pay programs operate on the premise that people maintain foreign-language proficiency for money. NYPD offers a counterexample to this hypothesis.

Some have attributed NYPD’s success to the fact that it draws its police officers from a large pool of citizenry who need not undergo the rigorous background checks required by federal agencies.<sup>336</sup> Indeed, federal agencies’ strict background checks

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<sup>332</sup> Scale and test unknown.

<sup>333</sup> There are nearly 19,000 registered members of the Language Initiative Program who are not certified, but have self-reported foreign language proficiency. NYPD, *NYPD Language Access Plan*, 7.

<sup>334</sup> NYPD, *NYPD Language Access Plan*, 7.

<sup>335</sup> Telephone conversation with NYPD official, October 10, 2011.

<sup>336</sup> Dickey, *Securing the City: Inside America’s Best Counterterrorism Force—the NYPD*, 142.

preclude them from recruiting as broadly as NYPD. But this thesis research reveals other reasons for NYPD's success. As previously stated, NYPD utilizes both qualified *and* unqualified linguists, taking advantage of pre-existing talent. It does so out of necessity: language is fundamental to local policing. In a democratic society, a police force must be able to communicate with the local population to effectively enforce the laws. Lacking such intrinsic necessity, other federal agencies have been able to function without developing foreign-language capability. For NYPD, however, as with Border Patrol and DTRA, its basic function requires foreign language capability. State Department officials have commented that a lack of language proficiency, on a personal level, does not stop FSOs from doing their jobs.<sup>337</sup> And the FBI pairs its Language Analysts with Special Agents in the field, enabling it to operate even when only 40 of its special agents speak Arabic. For organizations that cannot function without foreign language capability, however, the stakes are too high to simply write off a percentage of the work-force as "uncertified." Other organizations could benefit from similarly effective use of existing talent, especially given the increasing fiscal constraints on federal agencies.

#### **E. THE LANGUAGE FLAGSHIP**

Less than ten percent of all public high-school students studying a foreign language study something other than Spanish, French, or German.<sup>338</sup> In 2009, for every student studying Chinese in American colleges, 14 studied Spanish. For every student studying Arabic, six studied French.<sup>339</sup> Today, more college students study Spanish than all other foreign languages combined.<sup>340</sup> From a homeland defense and security perspective, such a dearth of interest in critical languages has raised concerns at the

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<sup>337</sup> GAO, GAO-09-955, 13.

<sup>338</sup> Jamie B. Draper and June H. Hicks, "Foreign Language Enrollments in Public Secondary Schools, Fall 2000," American Council on the Teaching of Foreign Languages, MAY 02, <http://www.actfl.org/files/public/enroll2000.pdf> (accessed 09 FEB 11), 1.

<sup>339</sup> Modern Language Association, "2009 Enrollment Survey Press Release," 08 DEC 10, [http://www.mla.org/pdf/2009\\_enrollment\\_survey\\_pr.pdf](http://www.mla.org/pdf/2009_enrollment_survey_pr.pdf) (accessed 01 NOV 11), 2. Analysis based on a comparison of page 2 figures.

<sup>340</sup> Modern Language Association, "Language Enrollment Database, 1958–2009," [http://www.mla.org/flsurvey\\_search](http://www.mla.org/flsurvey_search) (accessed 26 APR 11).

federal level, prompting creation of the National Security Education Program<sup>341</sup> and an organization called the Language Flagship.<sup>342</sup>

A partnership between the United States Government, universities, business, and communities, the Language Flagship receives its funding through the National Security Education Program.<sup>343</sup> Its mission is to establish a “new paradigm for advanced language education.”<sup>344</sup> Its literature indicates that it aims to create a cadre of individuals possessing “superior”<sup>345</sup> level foreign-language proficiency to work in government and industry. The Language Flagship oversees a variety of language programs spanning the education continuum from K-12, to college and graduate-level programs.<sup>346</sup>

The Flagship offers a graduate program which, while slightly different from language to language, generally consists of one year of instruction in a critical language in the United States (at a “Domestic Flagship Center”), followed by one year of immersion abroad. The year abroad includes university study, homestay, and internship opportunities. The program’s goal is to bring students from ILR Level 2 to ILR Level 3 or higher, while at the same time affording them the opportunity to earn a Master’s degree. Currently, the program offers degrees in Arabic, Chinese, Korean, Persian, and Russian.

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<sup>341</sup> The National Security Education Program (NSEP) was established by the David L. Boren National Security Education Act of 1991, and consists of eight initiatives which “integrate the best components of language learning and international education developed in conjunction with progressively minded partners throughout the U.S. education community.” The Language Flagship is one such initiative. National Security Education Program, “About NSEP,” <http://www.nsep.gov/about/> (accessed 28 OCT 11).

<sup>342</sup> The National Flagship Language Initiative was created by Intelligence Authorization Act of FY2003 (P.L. 107–306, Sec. 333), and is an amendment to the David L. Boren National Security Education Act of 1992 (50 U.S.C. 1902). The “Language Flagship” is the organization which oversees this initiative.

<sup>343</sup> The Language Flagship, “Funding Opportunities,” <http://www.thelanguageflagship.org/funding>, (accessed 26 APR 11).

<sup>344</sup> The Language Flagship, “Brochure,” [http://www.thelanguageflagship.org/images/documents/final\\_brochure\\_june\\_2010.pdf](http://www.thelanguageflagship.org/images/documents/final_brochure_june_2010.pdf) (accessed 28 OCT 11).

<sup>345</sup> This probably refers to the ACTFL Superior-level, which is roughly equivalent to ILR Level 3.

<sup>346</sup> The Language Flagship has provided language training for 3,000 K-12 students in Chinese and Arabic in diaspora communities around the U.S. The Language Flagship, “The Language Flagship K-12 Programs,” <http://www.thelanguageflagship.org/k-12-programs> (accessed 09 FEB 11.)

Students enter the Persian Flagship Graduate Program, for instance, with a minimum ILR Level 1+ proficiency in Persian. They study for approximately one year at the University of Maryland, College Park, with at least five hours a day of structured learning. They also participate in field trips and attend lectures by guest speakers. Some students then go on to study abroad for one year at The American Councils for International Education center in Dushanbe, Tajikistan, in a “simulated immersion” environment. Ideally, students will complete this program with a minimum proficiency of ILR Level 3.<sup>347</sup> Similar programs are available for Arabic, Chinese, Korean, and Russian. Students can apply for scholarships through a number of sources, including the Language Flagship Fellowship,<sup>348</sup> which covers all costs associated with the course of study, including a “modest” living stipend, but also entails a two-year work requirement within the U.S. National Security community, to include the Department of Homeland Security, upon completion of study.<sup>349</sup> Since the creation of NSEP, more than 2000 scholarship recipients have joined the national security workforce at ILR Levels 2 to 3, 77 of which completed their work requirement with DHS.<sup>350</sup>

## **1. Broader Analysis**

The Language Flagship model, like the FSI and DTRA models, represents one of the best and most forward-leaning approaches to high-proficiency language training in the U.S. government. Unfortunately, it also represents a drop in the bucket. As previously stated, only 2000 linguists who have graduated from NSEP scholarships have entered the National Security workforce in 20 years. It is unknown what percentage of these entrants are Language Flagship graduates, nor how many have remained in government beyond the expiration of their service obligation. Former Senator David Boren, who wrote the original NSEP legislation, has characterized the program as so

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<sup>347</sup> The Language Flagship, “Persian Flagship Graduate Program,” <http://www.thelanguageflagship.org/persian> (accessed 28 OCT 11).

<sup>348</sup> The Language Flagship, “The Language Flagship Fellowship,” [http://borenawards.org/the\\_language\\_flagship](http://borenawards.org/the_language_flagship) (accessed 28 OCT 11).

<sup>349</sup> The Language Flagship, “NSEP Service Requirement,” [http://borenawards.org/the\\_language\\_flagship/service.html](http://borenawards.org/the_language_flagship/service.html) (accessed 28 OCT 11).

<sup>350</sup> This equates to around 100 students per year. Numbers are not available regarding the Language Flagship, in particular. NSEP, “Results,” <http://www.nsep.gov/about/results/> (accessed 28 OCT 11).

important that he recommends to double, triple, or quadruple it.<sup>351</sup> Given the extent to which the Language Flagship incorporates best practices of high-proficiency language training, such as time-on-task and immersion, Senator Boren's recommendation should be heeded.

## **F. CONCLUSIONS**

Of the four agencies analyzed, only NYPD's language program can be categorized as fully successful. Despite not offering any language training to its employees, NYPD effectively uses foreign language in its homeland defense and security related missions. While the FBI has improved its Language Analyst program through GAO's strategic workforce planning model, it has failed to increase its percentage of Special Agent Linguists since 9/11, and limited evidence shows that it doesn't employ those Special Agents Linguists in positions which utilize their foreign-language proficiency. The Department of State, despite having one of the best foreign-language training programs in the United States, continues to experience problems filling its ranks with FSOs who possess the requisite foreign language proficiency. Customs and Border Protection, like NYPD, effectively utilizes its existing heritage and native speakers, although it lacks recurrent and advanced training for its trained linguists. And ICE appears to lack a coherent plan to even begin to effectively utilize foreign language in the post-9/11 environment.

The following section contains a table which summarizes the practices of each language program. It shows that the Successful programs all exhibit widespread or expanding use of native and heritage speakers, conduct proficiency testing, offer other incentives for language proficiency (such as hiring or job preference incentives for demonstrated foreign language proficiency), and offer regular exposure to foreign language at work. While these practices are necessary for foreign language programs to be successful, they are not sufficient, alone. For instance, Customs and Border Protection

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<sup>351</sup> NSEP, "NSEP Video: Breaking the Language Barrier," <http://www.nsep.gov/about/> (accessed 03 NOV 11).

exhibits all of these organizational practices, yet is only partially successful because employees who aren't native or heritage speakers could benefit from recurrent and higher-level training.

## 1. Assessment of Language Programs

ORGANIZATION													
BEST ORGANIZATIONAL PRACTICES	<b>Key</b> <b>Y – Yes    N – No</b> <b>U – Unknown</b> <b>S – Success</b> <b>F – Failure</b> <b>P – Partial Success</b> <b>I/S – Insufficient Data</b>	DTRA	State Consular Officer	FBI Language Analyst	FBI Special Agent Linguist	FBI Intelligence Analyst	CBP Border Patrol Agent	CBP Customs Officer	CBP Air and Marine Officer	ICE ERO Officer	ICE Special Agent	ICE HSI-Intel	NYPD Officer
	Wide/Expanding Use of Heritage/Native Speakers	Y	N <sup>1</sup>	Y	N <sup>2</sup>	N <sup>3</sup>	Y	Y	Y	Y	U	U	Y <sup>4</sup>
	Aptitude Test	Y	N <sup>5</sup>	N/A	N	N	Y <sup>6</sup>	N	N	N	N	N	N
	Proficiency Test	Y	Y <sup>7</sup>	Y <sup>8</sup>	Y <sup>9</sup>	Y <sup>10</sup>	Y <sup>11</sup>	Y <sup>12</sup>	Y <sup>13</sup>	Y <sup>14</sup>	Y <sup>15</sup>	N <sup>16</sup>	Y <sup>17</sup>
	Regular Diagnostics Test	Y	Y	N/A	N	N	Y <sup>18</sup>	N	N	N	N	N	N
	Proficiency Pay	Y	Y <sup>19</sup>	U <sup>20</sup>	Y <sup>21</sup>	U <sup>22</sup>	N <sup>23</sup>	Y <sup>24</sup>	N <sup>25</sup>	N <sup>26</sup>	Y <sup>27</sup>	N <sup>28</sup>	N <sup>29</sup>
	Other Lang. Incentives (Hiring/Job Positions)	Y	Y <sup>30</sup>	Y <sup>31</sup>	Y <sup>32</sup>	Y <sup>33</sup>	Y <sup>34</sup>	Y <sup>35</sup>	Y <sup>36</sup>	U	U	U	Y <sup>37</sup>
	Intensive Course	Y	Y <sup>38</sup>	N/A	Y <sup>39</sup>	Y <sup>40</sup>	Y <sup>41</sup>	Y <sup>42</sup>	Y <sup>43</sup>	Y <sup>44</sup>	N <sup>45</sup>	N <sup>46</sup>	N
	Study Abroad/Immersion	Y	Y <sup>47</sup>	N/A	Y <sup>48</sup>	U	N	Y <sup>49</sup>	N	N	N	N	N <sup>50</sup>
	Regular Work Exposure	Y	Y	Y	N <sup>51</sup>	N <sup>52</sup>	Y	Y	Y <sup>53</sup>	Y	U	U	Y
	Recurrent Training	Y	Y <sup>54</sup>	N/A	Y <sup>55</sup>	Y <sup>56</sup>	N	N	N	N	N	N	N
	Advanced Training/ILR Level 3 and Above	Y	Y <sup>57</sup>	N/A	N <sup>58</sup>	N	N	N	N	N	N	N	N
	<b>Overall Appraisal<sup>59</sup></b>	<b>S</b>	<b>P<sup>60</sup></b>	<b>S</b>	<b>F<sup>61</sup></b>	<b>I/S</b>	<b>P<sup>62</sup></b>	<b>P</b>	<b>P</b>	<b>P</b>	<b>F<sup>63</sup></b>	<b>I/S</b>	<b>S</b>

Table 3. Assessment of Language Programs



Endnotes from Table 3:

- <sup>1</sup> GAO, GAO-02-514T, 9; GAO, GAO-02-375, 18.
- <sup>2</sup> GAO, GAO-02-514T, 9; GAO, GAO-02-375, 18; Eggen, “FBI Agents Still Lacking Arabic Skills,” 2.
- <sup>3</sup> GAO, GAO-02-514T, 9; GAO, GAO-02-375, 18; Eggen, “FBI Agents Still Lacking Arabic Skills,” 2.
- <sup>4</sup> Dickey, *Securing the City: Inside America’s Best Counterterrorism Force—the NYPD*, 142–143.
- <sup>5</sup> E-mail correspondence with FSI official, 02 NOV 11.
- <sup>6</sup> Customs and Border Protection, “FAQs.”
- <sup>7</sup> GAO, GAO-09-955, 6.
- <sup>8</sup> GAO, GAO-02-375, 19.
- <sup>9</sup> GAO, GAO-02-375, 19.
- <sup>10</sup> GAO, GAO-02-375, 19; Federal Bureau of Investigation, “Intelligence Analyst Selection and Hiring Process FAQs: What Can I Expect in the Interview?,” <http://www.fbijobs.gov/12151.asp> (accessed 10 NOV 11).
- <sup>11</sup> GAO, GAO-10-714, 20.
- <sup>12</sup> GAO, GAO-10-714, 20.
- <sup>13</sup> GAO, GAO-10-714, 20.
- <sup>14</sup> GAO, GAO-10-714, 20.
- <sup>15</sup> GAO, GAO-10-714, 20.
- <sup>16</sup> GAO, GAO-10-714, 20.
- <sup>17</sup> NYPD, *NYPD Language Access Plan*, 7.
- <sup>18</sup> Customs and Border Protection, “FAQs.”
- <sup>19</sup> GAO, GAO-09-955, 20–21.
- <sup>20</sup> A new language incentives program was announced in 2010. It is unknown if Language Analysts and Intelligence analysts can receive pay under this new program. Federal Bureau of Investigation, “Language Services,” 1.
- <sup>20</sup> GAO, GAO-10-714, 20.
- <sup>21</sup> GAO, GAO-02-375, 17.
- <sup>22</sup> A new language incentives program was announced in 2010. It is unknown if Language Analysts and Intelligence analysts can receive pay under this new program. Federal Bureau of Investigation, “Language Services,” 1.
- <sup>23</sup> GAO, GAO-10-714, 20.
- <sup>24</sup> GAO, GAO-10-714, 20.
- <sup>25</sup> GAO, GAO-10-714, 20.
- <sup>26</sup> GAO, GAO-10-714, 20.
- <sup>27</sup> GAO, GAO-10-714, 20.
- <sup>28</sup> GAO, GAO-10-714, 20.
- <sup>29</sup> Telephone conversation with NYPD official, October 10, 2011.
- <sup>30</sup> GAO, GAO-02-514T, 9; GAO, GAO-09-955, 19.
- <sup>31</sup> GAO, GAO-02-275, 19; GAO, GAO-02-514T, 9.
- <sup>32</sup> GAO, GAO-02-375, 19; 47; GAO, GAO-02-514T, 9.
- <sup>33</sup> GAO, GAO-02-375, 19; GAO, GAO-02-514T, 9.
- <sup>34</sup> Telephone conversation with CBP official, 11 OCT 11.
- <sup>35</sup> Telephone conversation with CBP official, 11 OCT 11.
- <sup>36</sup> Telephone conversation with CBP official, 11 OCT 11.
- <sup>37</sup> Telephone conversation with NYPD official, 10 OCT 11.
- <sup>38</sup> GAO, GAO-09-955, 18–19.
- <sup>39</sup> GAO, GAO-02-375, 16.
- <sup>40</sup> GAO, GAO-02-375, 16.
- <sup>41</sup> GAO, GAO-10-714, 20.
- <sup>42</sup> GAO, GAO-10-714, 20.
- <sup>43</sup> GAO, GAO-10-714, 20.
- <sup>44</sup> GAO, GAO-10-714, 20.
- <sup>45</sup> GAO, GAO-10-714, 20.
- <sup>46</sup> GAO, GAO-10-714, 20.
- <sup>47</sup> E-mail correspondence with FSI official, 03 NOV 11.

48 Author's experience suggests that this may happen on an individual basis.

49 Robert White, "Aqui se habla Espanol: Officers learn basics of Spanish catered to job," *U.S. Customs and Border Protection Today* (April 2006)  
[http://www.cbp.gov/xp/CustomsToday/2006/april/officers\\_learn\\_spanish.xml](http://www.cbp.gov/xp/CustomsToday/2006/april/officers_learn_spanish.xml) (accessed 08 NOV 11).

50 Telephone conversation with NYPD official, 10 OCT 11.

51 Eggen, "FBI Agents Still Lacking Arabic Skills," 1.

52 No evidence indicates that Intelligence Analysts have any more exposure to foreign language than Special Agents, or are being used in jobs which take advantage of their particular foreign language. Eggen, "FBI Agents Still Lacking Arabic Skills," 2.

53 This varies by position. Pilots, for instance, probably don't use their Spanish often, whereas crewmen do.

54 GAO, GAO-09-955, 18-19.

55 Eggen, "FBI Agents Still Lacking Arabic Skills," 2.

56 Federal Bureau of Investigation, "Language Services," 1.

57 GAO, GAO-09-955, 18-19.

58 There is no indication that this is occurring. Analysis would suggest, however, that Special Agent Linguists who are assigned as Legal Attaches to Arabic-speaking countries would probably go through identical training to FSOs, which includes training to ILR Level 3.

59 Overall appraisals are based on the criteria listed in Chapter I under Measuring Success in Meeting Post-9/11 Language Requirements.

60 Despite having a successful foreign language program, persistent foreign-language manning shortfalls preclude a rating of Success.

61 While there is evidence that Special Agent Linguists are being trained in foreign languages, there is also evidence that they are not being utilized in positions which take advantage of their foreign-language proficiency. Furthermore, the percentage of Special Agent linguists has remained constant since 2001, suggesting no marked improvement in foreign-language capability among Special Agent Linguists in ten years. I was unable to obtain amplifying information from the FBI regarding their Special Agent Linguist and Intelligence Analyst programs.

62 If not for GAO's reporting of the need for better training in regional dialects, and a lack of recurrent and advanced training, Customs and Border Protection units would be listed as a Success. Border Patrol appears to make up for deficiencies in recurrent and dialect training by stationing heritage and native speakers along the Southwest Border, and the Office of Field Operations utilizes an innovative immersion course for all officers slated for their Southwest Border, Miami, and Puerto Rico Field Offices. White, "Aqui se habla Espanol," 1.

63 The preponderance of evidence does not allow for a rating other than Failure for this program.

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## V. CONCLUSIONS

### A. BEST PRACTICES IN HIGH-PROFICIENCY LANGUAGE LEARNING

Analysis of best practices in linguist development reveals that motivation, time-on-task, and immersion are the most important factors in training linguists to high-level foreign-language proficiency. A comparison of six foreign language programs reveals that successful programs all exhibit four factors: wide or expanding use of heritage or native speakers, the use of proficiency testing, language-related incentives, and the regular use of foreign language at work. Combining best practices in linguist development and best organizational practices, the most successful organizations provide linguists a solid foundation of knowledge (when necessary), place them in jobs which require the regular use of language, provide recurrent training, and give linguists regular exposure to high-level language. While thesis research confirmed the benefits of utilizing heritage and native speakers, it also showed the challenges that organizations face in doing so, whether because of rigorous background checks, issues with English-language proficiency, or even a linguist's perceived objectivity.

When I began this research, I expected that in-depth research of high-proficiency linguists would prove that personal characteristics (specifically, an individual's personal history) could be used to predict high-level foreign-language achievement. Belying my expectations, the DTRA population showed little correlation between personal history and high-level language achievement. In contrast, it showed that motivation is more important than almost all other personal factors, with linguists with little tested "aptitude" sometimes surpassing all of their colleagues in high-level achievement. Motivation's role in foreign language acquisition is an area of expanding research. Closely related to motivation are confidence and tenacity, two additional areas of developing study.<sup>352</sup>

Still, while early exposure to language did not appear to be a causal factor in DTRA linguists' proficiency, many reports assess that it may aid in foreign-language acquisition. Multilingualism, another factor described by experts as important to high-

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<sup>352</sup> Leaver, "Motivation at Native-Like Levels of Foreign Language Proficiency," 59.

level proficiency, was widely, but not uniformly, present among DTRA linguists. Such lack of early exposure and uniform multilingualism offers some evidence that they may be less important to high-level language achievement than previous studies suggest.

In terms of organizational factors, constant exposure to foreign languages is as vital as personal motivation to linguists' success. Such exposure can be gained through immersion or time-on-task, including in the work environment. Those who use their foreign language on a daily basis develop proficiency, although the level of sophistication of language is important. A linguist will never grow in proficiency if her work or training focuses entirely on using rehearsed commands (ILR Level 0+), such as telling someone to lie down, put their hands behind their back, etc. And all things being equal, immersion has proven the most consistently reliable method for achieving high-level proficiency. Nevertheless, thesis research also revealed that people naturally tend to resist immersion, often returning to their native tongues when the immersion environment permits.

Continuing with organizational factors, while all successful language programs offered preference in hiring or promotion based on demonstrated foreign language ability or preference in job or shift assignments, not all successful programs offered foreign language proficiency pay. This finding suggests that foreign language professionals desire recognition for their value, but that recognition does not necessarily have to include monetary reward. It also could suggest that by giving preference to native or heritage speakers in hiring, organizations naturally increase their percentage of native or heritage employees. Both of these factors were present in successful programs, complicating determining a precise causal variable.

One additional organizational factor, language aptitude testing, proved valuable for predicting success in basic courses of instruction. Language aptitude tests showed no predictive value, however, for overall language achievement. New tests may expand the predictive value of language aptitude testing, in general. In contrast, proficiency testing proved important for a number of reasons. As an initial matter, assessing proficiency is a vital precursor to effective management of linguists for homeland defense and security (How can we effectively employ resources to meet needs if we don't know what

resources we have, of what kind, and where?) But because different agencies use disparate methods to test linguists, the U.S. government cannot properly compare the effectiveness of its programs. Moreover, reliance on automated forms of testing could introduce an unnecessarily high level of error into the results. Testing should be standardized across the federal government.

Not only is testing vital to efficient employment of linguists, but regular diagnostic testing also aids in high-level language achievement. Finally, how different modalities interact, and how these interactions could affect the focus of language training, remains inconclusive.

### **1. A Simplified Model of Linguist Development**

Each high-proficiency linguist develops through a unique combination of best practices in language learning.<sup>353</sup> Nevertheless, drawing upon Dr. Betty Lou Leaver's model,<sup>354</sup> the results from Doughty and Kamide's study,<sup>355</sup> and my original analysis, I propose a simplified model for understanding linguist development: A linguist begins with a foundation of knowledge, whether gained through an intensive course, university study, or heritage experience, which brings the linguist to roughly ILR Level 2 (analogous to the Cold War model discussed earlier in Chapter II). Next, the linguist enters either a structured study-abroad program or has immersion or limited work experiences abroad, bringing her to ILR level 3.<sup>356</sup> Finally, the linguist either participates in matriculated study or immersed work experience abroad, or directed study to refine and solidify linguistic gains, bringing her to ILR Level 4.

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<sup>353</sup> Mueller, "Tracing the Steps of a Successful Multilingual," 57.

<sup>354</sup> Leaver, *Achieving Native-Like Second Language Proficiency*, 20. The distinction here between study abroad and direct matriculation abroad is Leaver's, as is the concept of directed study for high-level language acquisition. Leaver, *Achieving Native-Like Second Language Proficiency*, 144–145.

<sup>355</sup> Doughty and Kamide, *Pathways to High-level Success in Foreign Language Learning*, 5.

<sup>356</sup> See Malone et al., "Attaining High Levels of Proficiency," 71; Leaver, *Achieving Native-Like Second Language Proficiency*, 112; Brecht, Davidson, and Ginsberg, "Predictors of Foreign Language Gain during Study Abroad," 17, for further evidence that study-abroad is most effective from ILR Level 2 to ILR Level 3. In addition, the results of the DTRA study confirm that immersion is necessary to bring a speaker to ILR Level 3.

Level of Language Achievement	Critical Factors in Development	
	ILR LEVEL 0 – 2 <b>FOUNDATION</b>	Heritage Experience Intensive Courses College Experience
	ILR LEVEL 2 – 3 <b>IMMERSION</b>	Living Abroad Study Abroad Limited Work Abroad
	ILR LEVEL 3 – 4 <b>UTILIZATION</b>	Direct University Matriculation Abroad Work Abroad Directed Study for Language Refinement

Table 4. Simplified Model of Linguist Development

As this is a simplified model, many exceptions defy its framework. As Mueller might argue, however, these exceptions occur because individual students exhibit disparate personal factors, or have different experiences which emphasized one best practice over another. While one linguist may achieve high-level language success because of pressure from his diaspora community,<sup>357</sup> another may be inherently talented and choose her language for entirely utilitarian purposes.<sup>358</sup> DTRA's training program and the Department of State's Arabic Language Program both exhibit elements of the simplified model above, most importantly immersion experience and time-on-task. Still, this simplified model serves as a useful conceptual baseline from which to identify and evaluate the personal factors and organizational practices most conducive to high-level language learning.

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<sup>357</sup> Mueller, "Tracing the Steps of a Successful Multilingual," 53.

<sup>358</sup> Mueller, "Tracing the Steps of a Successful Multilingual," 55.

## **B. PRACTICAL RECOMMENDATIONS FOR POLICY**

### **1. Critical Homeland Defense and Security Languages**

Much of the debate regarding foreign language capability in the federal government post-9/11 has focused on a lack of foreign language capacity in “critical” languages, such as Arabic, Persian-Farsi, and Chinese. This thesis has shown that in terms of homeland defense and security related missions, the deficiency extends to “traditional” languages, such as Spanish. Furthermore, for homeland defense and security purposes, consistent Spanish-language proficiency would considerably improve border security (CBP officers and agents regularly interact with undocumented immigrants and *must* be able to communicate in Spanish, even if they are not native or heritage speakers). But, due to the enormity of the problem, achieving this goal may prove a greater challenge than increasing capacity in critical languages. In terms of critical languages, the Department of State is still not meeting language goals, especially in middle-eastern languages such as Arabic, and available evidence suggests that the FBI has likewise failed to fill its Special Agent ranks with linguists proficient in such languages. While the federal government should continue to develop its capability in critical languages, the nature of homeland defense and security related missions demands that it work as fervently to improve its Spanish language capability. Such an initiative will differ from those involving critical languages in terms of size and scope: All law enforcement officers should possess a low-level baseline of task-based Spanish, and should be provided regular opportunities for improvement. Such universal need for foreign language capability among law enforcement officers differs from other positions, which do not uniformly require foreign language proficiency.

### **2. Level of Proficiency Required for Homeland Defense and Security**

While many elected officials and government reports have recognized a need for “improved” foreign language capability, the degree of improvement needed has not been consistently quantified. In terms of homeland defense and security, thesis research suggests that an ILR 0+ to 1 increase across-the-board is needed in three distinct fields: law enforcement, intelligence, and interpretation. Law enforcement officers who must



detain, question, and arrest should demonstrate ILR Level 1 or better proficiency in speaking. Currently, CBP does not test officers, although one organization within ICE, ERO, does. Intelligence officers, including Special Agent Linguists, Consular Officers, and Intelligence Analysts, need around ILR Level 2+ to 3 in speaking in order to be able to detect cultural reference and nuance in responses. Finally, interpreters need, at a minimum, ILR Level 3, and they should strive for ILR Level 4. DTRA interpreters have proven that even ILR Level 2+ linguists can effectively interpret, but DTRA's model may prove difficult to duplicate due to other agencies' budgetary constraints.

### **3. Applicability of Language Models**

This thesis identified two models which have successfully developed high-proficiency linguists: DTRA and the Department of State, through its Foreign Service Institute. DTRA draws its interpreters from the military's best Russian linguists, trains them for an additional 47 weeks, and then assists in interpreters' language maintenance by employing four full-time language instructors for around 80 interpreters. Furthermore, DTRA interpreters' job is to maintain high-level foreign language proficiency, and they are fully supported by DTRA leadership in their language maintenance. The Department of State has similarly long pipelines and expenses associated with its language program, although evidence indicates that issues of organizational culture may impede high-proficiency language achievement. Both of these models, however, illustrate the time and commitment necessary to train personnel to high-proficiency levels. It is unlikely that other agencies will have the resources necessary to replicate such models, or will embark on such initiatives.

The success of NYPD, FBI's Language Analyst program, and to a lesser extent Customs and Border Protection, shows a more cost-effective method of utilizing foreign language capability. By capitalizing on existing heritage and native-speaking staff, NYPD has developed a very effective language program, and CBP has experienced similar success. FBI recruits professional-level interpreters for its Language Analyst program rather than training personnel. There are barriers to the widespread use of heritage and native speakers, though, the most common of which is extensive background

checks. Thus, for jobs which require less-stringent background investigations, wider use of pre-existing or recruited native and heritage speakers can improve an organization's language program.

Drawing from all models, there are simple changes that organizations can make which reflect best practices in language training. The DTRA model shows that teaming heritage and native speakers with trained linguists is beneficial to all linguists. It also shows the benefits of mandating weekly refresher training, and the value of placing linguists in positions which require the regular use of foreign language. Using foreign language on-the-job increases time-on-task, essentially turning work into refresher training. Finally, fostering a work environment that values language capability is vital to motivate linguists to continue to work towards the "above and beyond."

#### **4. The Role of Leadership**

Since 9/11, the Department of State, the FBI, and DHS have announced plans to improve their foreign language capability. A cursory review of language policy in the U.S, however, shows that similar initiatives have yielded few enduring results. In 1979, President Carter's Commission on Foreign Languages and International Studies called the state of foreign language capability in the United States "scandalous."<sup>359</sup> In 1991, the National Security Education Program was established to encourage undergraduate and graduate college students to study language and culture abroad.<sup>360</sup> In 2005, a "National Language Policy Summit" laid-out a detailed roadmap for improving language capacity in America.<sup>361</sup> Yet none of these efforts produced the sweeping changes they envisioned. Steve Ackley argues that the shortfalls in foreign language capability within the United States government will not improve until Americans, themselves, start valuing foreign

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<sup>359</sup> J. David Edwards, Ashley L. Lenker and Dara Kahn, "National Language Policies: Pragmatism, Process, and Products," Joint National Committee for Languages, National Council for Languages and International Studies, [http://www.languagepolicy.org/documents/JNCL-NCLIS\\_p2-42\\_v1.pdf](http://www.languagepolicy.org/documents/JNCL-NCLIS_p2-42_v1.pdf) (accessed 15 NOV 11), 2.

<sup>360</sup> NSEP, "History of NSEP," <http://www.nsep.gov/about/history/> (accessed 06 NOV 11).

<sup>361</sup> American Council on the Teaching of Foreign Languages, "A Blueprint for Action on Language Education, Summary of the Proceedings at the National Language Policy Summit, January 10–11, 2005," <http://www.actfl.org/files/public/blueprint.pdf> (accessed 09 FEB 11).

language proficiency.<sup>362</sup> Given that one observer has aptly characterized America as “Profoundly Monolingual,”<sup>363</sup> such changes in public opinion are unlikely.

As DTRA’s success has shown, consistent support from leadership is necessary to improve and maintain foreign language capability. The U.S. government, however, has not shown such steadfast commitment to language acquisition and improvement. Rather than directly calling for more Americans to study critical languages, the 2010 National Security Strategy recommends that Americans go abroad and “...build connections with people overseas,”<sup>364</sup> and even speaks to the benefits of the “pervasiveness of the English language and American cultural influence.” The implicit message is: English alone is good enough. As any high-proficiency linguist would attest, one of the factors most important to success is intrinsic motivation – a desire to learn foreign languages. Until the United States government can begin to internalize such a desire, other issues will prove more pressing, other initiatives more important. If history serves as a guide, without support from the highest levels of government, the improvements in foreign language capability the United States government has achieved since 9/11 will prove fleeting. As the Department of State has demonstrated, even in organizations where foreign language capability would otherwise appear vital to their survival, such commitment from leadership sometimes does not exist. Unless more organizational leaders follow Secretary Panetta’s example of demanding professional-level foreign

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<sup>362</sup> Steve Ackley, quoted in Eggen, “FBI Still Lacking Arabic Skills,” 2.

<sup>363</sup> Timothy Reagan, “Language and language education in the United States in the twenty-first century,” *Language in the Twenty-First Century: Selected Papers of the Millennial Conference of the Center for Research and Documentation on World Language Problems*, ed. Humphrey Tonkin (Philadelphia, PA: John Benjamins Publishing Company, 2003), 135.

<sup>364</sup> U.S. National Security Strategy. May 2010, [http://www.whitehouse.gov/cites/default/files/rss\\_viewer/national\\_security\\_strategy.pdf](http://www.whitehouse.gov/cites/default/files/rss_viewer/national_security_strategy.pdf), (accessed 09 FEB 11), 29.

language proficiency,<sup>365</sup> organizations will continue to produce less-than-professional-level linguists, and America may prove itself monolingual, indeed.

### **C. AVENUES FOR FURTHER RESEARCH**

In her article, “Motivation at Native-Like Levels of Foreign Language Proficiency,” Dr. Leaver provides a useful roadmap for further research into motivation in second language acquisition.<sup>366</sup> Given that this thesis revealed motivation to be the most important personal factor in second language acquisition, it deserves further study. This further research should extend to both intrinsic and extrinsic motivation, and should also examine whether foreign language proficiency pay really produces gains commensurate with its cost.

In terms of organizational practices, this thesis showed strong correlation between immersion and improvement in speaking proficiency. Given the demand for competent speakers in the post-9/11 world, the efficacy of mandating immersion during training and work evolutions should be researched further: what if the business of the day among linguists was conducted to the maximum extent possible in their target language? What if trainee linguists at DLI, FLETC, and FSI went home to foreign-language only dormitories or homes (as the Middlebury model requires)? Conducting short and long-term studies of mandatory immersion could better define and illustrate the value of immersion. And if studies can more conclusively show that immersion at home can be as valuable as immersion abroad, organizations may change their lax attitude regarding the use of foreign language in the workplace and at home, potentially precipitating a major shift in the U.S. government’s approach to foreign language training.

Although it has been widely recognized since 9/11 that American homeland defense and security requires greater attention to foreign language capability, many of

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<sup>365</sup> Former Director of Central Intelligence Leon Panetta, in an effort to fill the highest ranks of CIA with career officers who actually value high-level language proficiency, mandated that all new Senior Intelligence Service (SIS) candidates meet basic foreign language proficiency requirements. Central Intelligence Agency, “CIA Director Leon E. Panetta Announces Stronger Language Requirements for Promotion,” Press Release, January 29, 2010, <https://www.cia.gov/news-information/press-releases-statements/press-release-2010/cia-director-panetta-announces-stronger-language-requirements-for-promotion.html> (accessed 27 OCT 11).

<sup>366</sup> Leaver, “Motivation at Native-Like Levels of Foreign Language Proficiency,” 72.

our most prominent language training programs remain stuck in a Cold War mindset that has failed to produce the expertise needed. This thesis has provided a theoretical and practical model which, together with future work by scholars and practitioners, should enable the Department of Defense, federal agencies, and others to improve their training methods and organizational practices to help develop future generations of high-proficiency linguists capable of meeting the needs of homeland defense and security.

## LIST OF REFERENCES

- Ambrose, Stephen E. *Undaunted Courage*. New York: Touchstone, 1996.
- American Council on the Teaching of Foreign Languages (ACTFL). "A Blueprint for Action on Language Education, Summary of the Proceedings at the National Language Policy Summit, January 10–11, 2005."  
<http://www.actfl.org/files/public/blueprint.pdf> (accessed 09 FEB 11).
- Ayad, Moustafa. "Speaking Arabic, other Eastern Languages, Is High on FBI's Wish List." *Pittsburg Post-Gazette*, 19 FEB 07.
- Black, William B. "The Intelligence Community's National Security Requirement for Diversity of Languages, Skills, and Ethnic and Cultural Understanding." Statement for the Record before the House Permanent Select Committee on Intelligence Building Capabilities, 05 NOV 03.  
[http://www.nsa.gov/public\\_info/speeches\\_testimonies/5nov03\\_black.shtml](http://www.nsa.gov/public_info/speeches_testimonies/5nov03_black.shtml) (accessed 08 MAY 11).
- Block, David. *Second Language Identities*. New York: Continuum, 2007.
- Border Wars*. Season 1. Created by Nick Stein. Washington, DC: National Geographic Channel, 2010. DVD.
- Brecht, Richard D. "Coordinated, Comprehensive, Cohesive, and Collaborative Federal Language Capabilities." Executive Summary. Testimony before U.S. Senate Committee on Homeland Security and Governmental Affairs Subcommittee on Oversight of Government Management, the Federal Workforce, and the District of Columbia on "Closing the Language Gap: Improving the Federal Government's Foreign Language Capabilities." 29 JUL 10.  
<http://newsdesk.umd.edu/pdf/2010/BrechtESRevised.pdf> (accessed 15 NOV 11).
- . "The Language Crisis in the War on Terror." The Eisenhower Institute. Meeting report by Josh Kolchins, 24 OCT 02.  
[http://www.eisenhowerinstitute.org/events/past\\_events/old\\_events/102102Brecht.dot](http://www.eisenhowerinstitute.org/events/past_events/old_events/102102Brecht.dot) (accessed 09 FEB 11).
- Brecht, Richard, Dan Davidson, and Ralph B. Ginsberg. "Predictors of Foreign Language Gain during Study Abroad." NFLC Occasional Papers. Washington, D.C.: National Foreign Language Center, 1993.  
<http://www.eric.ed.gov/PDFS/ED360828.pdf> (accessed 15 NOV 11).

- Browning, Christopher A. "A Glimpse into the future... The Right Place at the Right Time—It's No Accident." In *Arms Control Treaties and Agreements*. Defense Threat Reduction Agency, Russian Arms Control Speaking Proficiency Course, Trimesters II & III, 2011, 3.
- Bunting, Dr. Michael. "Improving DLAB's Prediction: New Ways to Identify Foreign Language Learning Potential." CASL Research Fact Sheet, University of Maryland Center for Advanced Study of Language, April 15, 2010.  
[http://www.casl.umd.edu/cites/default/files/fs\\_82114\\_201004\\_final.pdf](http://www.casl.umd.edu/cites/default/files/fs_82114_201004_final.pdf) (accessed 22 MAY 11).
- Central Intelligence Agency. "CIA Director Leon E. Panetta Announces Stronger Language Requirements for Promotion." Press Release, 29 JAN 10.  
<https://www.cia.gov/news-information/press-releases-statements/press-release-2010/cia-director-panetta-announces-stronger-language-requirements-for-promotion.html> (accessed 27 OCT 11).
- Chin, Ko-Lin. *Chinatown Gangs: Extortion, Enterprise, and Ethnicity*. New York: Oxford University Press, 1996.
- Clausner, Timothy, Kathy Rhoad, Melissa Fox, Jean Hobbs, Toby Merriken, Amanda Lutz, Karen Vatz, and Catherine Doughty. *Pathways to Success: Comparison of Language Histories and Learning Experiences*. University of Maryland Center for Advanced Study of Language, 2009.
- Coalition of Distinguished Language Centers (CDLC). *What Works: Helping Students Reach Native-Like Second Language Competence*. Edited by Dr. Betty Lou Leaver. Hollister, CA: MSI Press, 2008.
- Conway, Col John. "Civilian Language Education in America." *Air and Space Power Journal* 21 (Fall 2010): 74–88.  
[http://www.airpower.maxwell.af.mil/airchronicles/apj/apj10/fal10/2010\\_3\\_06\\_conway.pdf](http://www.airpower.maxwell.af.mil/airchronicles/apj/apj10/fal10/2010_3_06_conway.pdf) (accessed 10 Nov10).
- D'Angelo, Michael F. "Options for Meeting U.S. Navy Foreign Language and Cultural Awareness Requirements in the Post-9/11 Security Environment." Master's Thesis, Naval Postgraduate School, 2009.
- Davidson, Joe. "Language proficiency is Foreign Service's 'greatest challenge,' Negroponte says." *Washington Post*, 08 APR 10.  
<http://www.washingtonpost.com/wp-dyn/content/article/2010/04/07/AR2010040704503.html> (accessed 28 MAY 11).
- Defense Threat Reduction Agency. *Arms Control Treaties and Agreements*. Russian Arms Control Speaking Proficiency Course, Trimesters II & III, 2011.

- Defense Threat Reduction Agency & U.S. STRATCOM Center for Combating WMD. "International Counter-proliferation Program." <http://www.dtra.mil/Missions/ARmsControlVerification/ICP.aspx> (accessed 29 MAY 11).
- Dickey, Christopher. *Securing the City: Inside America's Best Counterterror Force—the NYPD*. New York: Simon & Schuster, 2009.
- Defense Language Institute Foreign Language Center. "About DLIFLC." <http://www.dliflc.edu/about.html> (accessed 31 OCT 11).
- . "Fury Brigade Graduates from First Dari Language Class," 12 JUL 11. <http://www.dliflc.edu/news.aspx?id=85> (accessed 01 NOV 11).
- Doughty, Dr. Catherine and Dr. Jane Kamide. *TTO 026: Pathways to High-level Success in Foreign Language Learning*. University of Maryland Center for Advanced Study of Language, Volumes 1–4, 31 JUL 06.
- . *TTO 026: Pathways to High-level Success in Foreign Language Learning*. Executive Summary, University of Maryland Center for Advanced Study of Language, 19 OCT 06.
- Doughty, Dr. Catherine and Mr. Jared Linck. "Nearly Native Speakers: Test Aims to Predict Who Can Best Learn a Foreign Language," CASL Research Fact Sheet, University of Maryland Center for Advanced Study of Language, 15 SEP 10. [http://www.casl.umd.edu/cites/default/files/fs\\_2105\\_201009\\_v4.pdf](http://www.casl.umd.edu/cites/default/files/fs_2105_201009_v4.pdf) (accessed 21 MAY 11).
- Doughty, Dr. Catherine, Ms. Renee Meyer, and Dr. Richard Brecht. "The Making of a Cryptologic Language Analyst." CASL Research Synopsis, University of Maryland Center for Advanced Study of Language (CASL), February 2010. [http://www.casl.umd.edu/cites/default/files/CASL\\_Making\\_of\\_a\\_CLA\\_V3.pdf](http://www.casl.umd.edu/cites/default/files/CASL_Making_of_a_CLA_V3.pdf) (accessed 17 MAY 11).
- Doughty, Dr. Catherine, Karen Vatz, Lesley Howard, Kathy Rhoad, Sarah Stimley, and Amanda Lutz. *Becoming an Expert FBI Interpreter: Preliminary research reveals common factors among the most successful interpreters*. The University of Maryland Center for Advanced Study of Language, 2008. [http://www.casl.umd.edu/cites/default/files/Doughty08\\_BecominganExpert.pdf](http://www.casl.umd.edu/cites/default/files/Doughty08_BecominganExpert.pdf) (accessed 21 MAY 11).
- Draper, Jamie B. and June H. Hicks. "Foreign Language Enrollments in Public Secondary Schools, Fall 2000." American Council on the Teaching of Foreign Languages, MAY 02. <http://www.actfl.org/files/public/enroll2000.pdf> (accessed 09 FEB 11).



- Eastman, Dick. "The Myth of Ellis Island Name Changes." Ancestry.com, entry posted 16 MAY 01. <http://www.ancestry.com/learn/library/article.aspx?article=3893> (accessed 28 MAY 11).
- . "Ellis Island and Your Ancestors," Eastman's Online Genealogy Newsletter, entry posted 21 JUL 10. [http://blog.eogn.com/eastmans\\_online\\_genealogy/2010/07/ellis-island-and-your-ancestors.html](http://blog.eogn.com/eastmans_online_genealogy/2010/07/ellis-island-and-your-ancestors.html) (accessed 15 NOV 11).
- Edwards, J. David, Ashley L. Lenker and Dara Kahn. "National Language Policies: Pragmatism, Process, and Products." Joint National Committee for Languages, National Council for Languages and International Studies. [http://www.languagepolicy.org/documents/JNCL-NCLIS\\_p2-42\\_v1.pdf](http://www.languagepolicy.org/documents/JNCL-NCLIS_p2-42_v1.pdf) (accessed 15 NOV 11).
- Eggen, Dan. "FBI Agents Still Lacking Arabic Skills." *The Washington Post*, 11 OCT 06. <http://www.washingtonpost.com/wp-dyn/content/article/2006/10/10/AR2006101001388.html> (accessed 30 MAY 11).
- Ehrman, Madeline E. "Understanding the Learner at the Superior-Distinguished Threshold." In *Developing Professional-Level Language Proficiency*, edited by Betty Lou Leaver and Boris Shekhtman, 245–259. New York: Cambridge University Press, 2002.
- Ellis, MAJ Deborah M. "Integrating Language and Culture." Monograph, U.S. Army Command and General Staff College, 2005. <http://www.dtic.mil/cgi-bin/GetTRDoc?AD=ADA437562> (accessed 21 MAY 11).
- Federal Bureau of Investigation. "Home: About Us: What We Investigate." [http://www.fbi.gov/about-us/investigate/what\\_we\\_investigate](http://www.fbi.gov/about-us/investigate/what_we_investigate) (accessed 30 OCT 11).
- . "Language Services." <http://www.fbi.gov/about-us/ten-years-after-the-fbi-since-9-11/just-the-facts-1/language-services> (accessed 29 OCT 11).
- . "Quick Facts." <http://www.fbi.gov/about-us/quick-facts> (accessed 15 NOV 11).
- . "Intelligence Analyst Selection and Hiring Process FAQs: What Can I expect in the Interview?" <http://www.fbijobs.gov/12151.asp> (accessed 10 NOV 11).
- Federal Law Enforcement Training Center, "FLETC opens \$2.5M state-of-the-art ICE Academy classroom complex," 07 SEP 11. <http://www.fletc.gov/news/press-releases/fletc-opens-2.5m-state-of-the-art-ice-academy-classroom-complex> (accessed 29 OCT 11).

- Finnegan, William. "The Terrorism Beat." *The New Yorker*, 25 JUL 05.  
[http://www.newyorker.com/archive/2005/07/25/050725fa\\_fact2](http://www.newyorker.com/archive/2005/07/25/050725fa_fact2) (accessed 15 NOV 15).
- Gardner, Robert C. and Wallace E. Lambert. "Motivational Variables in Second-Language Acquisition." *Canadian Journal of Psychology* 13, no. 4 (December 1959): 266–272. <http://www.eric.ed.gov/PDFS/ED031968.pdf> (accessed 15 NOV 11).
- Gardner, Robert C. "Attitudes and Motivation in Second Language Learning." In *Bilingualism, Multiculturalism, and Second Language Learning: The McGill Conference in Honour of Wallace E. Lambert*, edited by Allan G. Reynolds, 43–63. New Jersey: Lawrence Erlbaum Associates, Inc., 1991.
- GAO. *Border Security: Strengthened Visa Process Would Benefit from Improvements in Staffing and Information Sharing*. GAO 05–859, SEP 05.  
<http://www.gao.gov/new.items/d05859.pdf> (accessed 28 MAY 11)
- . *Department of Homeland Security: DHS Needs to Comprehensively Assess Its Foreign Language Needs and Capabilities and Identify Shortfalls*. GAO-10–714, JUN 10. <http://www.gao.gov/new.items/d10714.pdf> (accessed 22 MAY 11).
- . *Department of State: Comprehensive Plan Needed to Address Persistent Foreign Language Shortfalls*. GAO-09–955, SEP 09.  
<http://www.gao.gov/new.items/d09955.pdf> (accessed 15 NOV 11).
- . *Department of State: Persistent Staffing and Foreign Language Gaps Compromise Diplomatic Readiness*. GAO-09–1046T, 24 SEP 09.  
<http://www.gao.gov/new.items/d091046t.pdf> (accessed 28 MAY 11).
- . *Department of State: Staffing and Foreign Language Shortfalls Persist Despite Initiatives to Address Gaps*. GAO-07–1154T, 01 AUG 07.  
<http://www.gao.gov/new.items/d071154t.pdf> (accessed 15 NOV 11).
- . *Foreign Languages: Human Capital Approach Needed to Correct Staffing and Proficiency Shortfalls*. GAO-02–375, JAN 02.  
<http://www.gao.gov/new.items/d02375.pdf> (accessed 21 MAY 11).
- Interagency Language Roundtable. <http://www.govtilr.org/> (accessed 15 NOV 11).
- Johnston, David. "FBI is Accused of Bias by Arab-American Agent." *The New York Times*, 20 JUL 03. <http://www.nytimes.com/2003/07/20/us/fbi-is-accused-of-bias-by-arab-american-agent.html?pagewanted=all&src=pm> (accessed 30 OCT 11).
- Lardner, James and Thomas Reppetto. *NYPD: A City and Its Police*. New York: Henry Holt & Company, LLC, 2000.

- The Language Flagship. "Brochure."  
[http://www.thelanguageflagship.org/images/documents/final\\_brochure\\_june\\_2010.pdf](http://www.thelanguageflagship.org/images/documents/final_brochure_june_2010.pdf) (accessed 28 OCT 11).
- . "Creating Global Professionals: Graduate Programs."  
<http://www.thelanguageflagship.org/graduate-programs> (accessed 28 May 11).
- . "Funding Opportunities."  
<http://www.thelanguageflagship.org/funding> (accessed 26 APR 11).
- . "The Language Flagship Fellowship."  
[http://borenawards.org/the\\_language\\_flagship](http://borenawards.org/the_language_flagship) (accessed 28 OCT 11).
- . "The Language Flagship K-12 Programs."  
<http://www.thelanguageflagship.org/k-12-programs> (accessed 09 FEB 11).
- . "NSEP Service Requirement."  
[http://borenawards.org/the\\_language\\_flagship/service.html](http://borenawards.org/the_language_flagship/service.html) (accessed 28 OCT 11).
- . "Persian Flagship Graduate Program."  
<http://www.thelanguageflagship.org/persian> (accessed 28 OCT 11).
- Leaver, Dr. Betty Lou. *Achieving Native-Like Second Language Proficiency, Volume 1: Speaking*. Salinas, CA: MSI Press, 2003.
- . "Motivation at Native-Like Levels of Foreign Language Proficiency: A Research Agenda." *Journal for Distinguished Language Studies* 1, no. 1 (Spring 2003): 59–82.
- Leaver, Betty Lou and Boris Shekhtman. "Principles and practices in teaching Superior-level language skills: Not just more of the same." In *Developing Professional Level Language Proficiency*, edited by Betty Lou Leaver and Boris Shekhtman, 3–33. New York: Cambridge University Press, 2002.
- Leaver, Betty Lou and Boris Shekhtman, eds. *Developing Professional-Level Language Proficiency*. New York: Cambridge University Press, 2002.
- Lee, Annette C. "The Attrition Rate at DLI." Master's thesis. U.S. Naval Postgraduate School, 1990.
- Malone, Margaret E., Benjamin Rifkin, Donna Christian, and Dora E. Johnson. "Attaining High Levels of Proficiency: Challenges for Language Education in the United States." *Journal for Distinguished Language Studies* 2 (2004): 67–88.

- Merriam-Webster Online Dictionary, s.v. "Linguist." Accessed 16 MAY 11.  
<http://www.merriam-webster.com/dictionary/linguist>.
- Middlebury College. "The Language Pledge."  
<http://www.middlebury.edu/ls/approach/pledge> (accessed 22 MAY 11).
- . "Program List." <http://www.middlebury.edu/ls/programs> (accessed 22 MAY 11).
- Modern Language Association. "2009 Enrollment Survey Press Release." 08 DEC 10,  
[http://www.mla.org/pdf/2009\\_enrollment\\_survey\\_pr.pdf](http://www.mla.org/pdf/2009_enrollment_survey_pr.pdf) (accessed 01 NOV 11)
- . "Language Enrollment Database, 1958–2009."  
[http://www.mla.org/flsurvey\\_search](http://www.mla.org/flsurvey_search) (accessed 26 APR 11).
- Mueller, Charles M. "Tracing the Steps of a Successful Multilingual: A Synopsis." *Journal for Distinguished Language Studies* 1, no. 1(Spring 2003): 51–82.
- The National Commission of Terrorist Attacks Upon the United States. *The 9/11 Commission Report: Final Report of the National Commission of Terrorist Attacks upon the United States*. New York: W. W. Norton & Company, 2004.
- The National Language Conference. *(Draft) A Call to Action for National Foreign Language Capabilities*. 17 AUG 2004.  
<http://www.actfl.org/files/public/NatlForeignLangConfWhtPpr.pdf> (accessed 22 MAY 11).
- National Security Education Program. "About NSEP." <http://www.nsep.gov/about/> (accessed 28 OCT 11).
- . "Results." <http://www.nsep.gov/about/results/> (accessed 28 OCT 11).
- . "NSEP Video: Breaking the Language Barrier," <http://www.nsep.gov/about/> (accessed 03 NOV 11).
- New York Times*. "Talks Fourteen Tongues." 09 JUN 1907.
- . "Petrosino a Terror to Criminal Bands." 14 MAR 1909.
- New York Police Department. "NYPD's Foreign Language Outreach."  
[http://www.nyc.gov/html/nypd/html/news/news\\_foreign\\_lang\\_outreach.shtml](http://www.nyc.gov/html/nypd/html/news/news_foreign_lang_outreach.shtml) (accessed 03 JUN 11).
- . *NYPD Language Access Plan*. 21 FEB 11.  
[http://www.nyc.gov/html/nypd/html/community\\_affairs/nypd\\_language\\_access\\_p  
lan.shtml](http://www.nyc.gov/html/nypd/html/community_affairs/nypd_language_access_plan.shtml) (accessed 15 NOV 11).

- Pariah, Marina. "Russian Cops on the Beat in New York." *Russia Today*. 08 JAN 08.  
<http://www.youtube.com/watch?v=BaXwH5jEWbI> (accessed 11 SEP 11).
- Porter, Dr. Clifford F. *Asymmetrical Warfare, Transformation, and Foreign Language Capability*. Fort Leavenworth, KS: CSI Press, 2003.  
<http://www.cgsc.edu/carl/download/csipubs/porter.pdf> (accessed 17 MAY 11).
- Reagan, Timothy. "Language and language education in the United States in the twenty-first Century." In *Language in the Twenty-First Century: Selected Papers of the Millennial Conference of the Center for Research and Documentation on World Language Problems*, edited by Humphrey Tonkin. Philadelphia, PA: John Benjamins Publishing Company, 2003.
- Rittel, Horst W. J. Rittel and Melvin M. Weber. "Dilemmas in a General Theory of Planning." *Policy Sciences* 4 (1973): 155–169.  
[http://amorystarr.com/ad\\_ict4d\\_reader/rittel1973.pdf](http://amorystarr.com/ad_ict4d_reader/rittel1973.pdf) (accessed 28 MAY 11).
- Ryan, Richard M. and Edward L Deci. "Intrinsic and Extrinsic Motivation: Classic Definitions and New Directions." *Contemporary Educational Psychology* 25 (2000): 54–67.
- Shekhtman, Boris, Natalia Lord, and Ekaterina Kuznetsova. "Complication Exercises for Raising the Oral Proficiency Level of Highly Advanced Language Students." *Journal for Distinguished Language Studies* 1, no. 1(Spring 2003): 31–50.
- Soudakoff, Stephen. "Developing 3+/4 Reading and Translation Skills for Presidential Needs: A Summary." *Journal for Distinguished Language Studies* 2(2004): 19–26.
- Stevens, Lieutenant Sean. "Khastan Tawanestan! – 'We Can, We Will!' Shaping the Battlefield in Afghanistan in Dari and Pashto – not English." *Small Wars Journal*, 07 SEP 10. <http://smallwarsjournal.com/blog/journal/docs-temp/528-stevens.pdf> (accessed 28 MAY 11).
- Twist, Dr. Alina. "Expert Language Professionals: How did they attain their high-level foreign language skills?" CASL Research Fact Sheet, University of Maryland Center for Advanced Study of Language, 15 SEP 09.  
[http://www.casl.umd.edu/cites/default/files/TTO2126\\_FS\\_200912.pdf](http://www.casl.umd.edu/cites/default/files/TTO2126_FS_200912.pdf) (accessed 08 MAY 11).
- Transactional Records Access Clearinghouse. "FBI Staffing Trends, FY1986–2006." TRACFBI, National Profile and Enforcement Trends Over Time,  
<http://trac.syr.edu/tracfbi/newfindings/v05/include/20yearstaffingtable.html> (accessed 15 NOV 11)

- U.S. Army Recruiting Webpage. “Linguists.”  
[www.goarmy.com/linhuist/about/linguist.html](http://www.goarmy.com/linhuist/about/linguist.html) (accessed 12 OCT 11).
- U.S. Census Bureau. “2010 Census Data.” <http://2010.census.gov/2010census/index.php>  
(accessed 16 SEP 11).
- U.S. Customs and Border Protection. “Border Patrol Overview.”  
[http://www.cbp.gov/xp/cgov/border\\_security/border\\_patrol/border\\_patrol\\_ohs/overview.xml](http://www.cbp.gov/xp/cgov/border_security/border_patrol/border_patrol_ohs/overview.xml) (accessed 28 OCT 11).
- . “CBP Border Patrol Academy,”  
[http://www.cbp.gov/xp/cgov/careers/customs\\_careers/border\\_careers/cbp\\_bp\\_academy.xml](http://www.cbp.gov/xp/cgov/careers/customs_careers/border_careers/cbp_bp_academy.xml) (accessed 28 OCT 11).
- . “FAQs – Working for the Border Patrol.”  
[http://www.cbp.gov/xp/cgov/careers/customs\\_careers/border\\_careers/bp\\_agent/faqs\\_working\\_for\\_the\\_usbp.xml](http://www.cbp.gov/xp/cgov/careers/customs_careers/border_careers/bp_agent/faqs_working_for_the_usbp.xml) (accessed 28 OCT 11)
- . “On a Typical Day in Fiscal Year 2010, CBP....”  
[http://www.cbp.gov/xp/cgov/about/accomplish/typical\\_day\\_fy2010.xml](http://www.cbp.gov/xp/cgov/about/accomplish/typical_day_fy2010.xml)  
(accessed 29 OCT 11).
- . “Office of Air and Marine Overview.”  
[http://www.cbp.gov/xp/cgov/border\\_security/air\\_marine/cbp\\_air\\_marine\\_overview.xml](http://www.cbp.gov/xp/cgov/border_security/air_marine/cbp_air_marine_overview.xml) (accessed 28 OCT 11)
- . “Officer Fact Sheet.”  
[http://www.cbp.gov/linkhandler/cgov/careers/customs\\_careers/officer/officer\\_fact\\_sheet.ctt/officer\\_fact\\_sheet.pdf](http://www.cbp.gov/linkhandler/cgov/careers/customs_careers/officer/officer_fact_sheet.ctt/officer_fact_sheet.pdf) (accessed 28 OCT 11);
- U.S. Congress. House. *Intelligence Authorization Act for Fiscal Year 2002*. 107th Cong. 1st sess., 107–219. Sec. 1., Foreign Language Expertise.  
[http://www.fas.org/irp/congress/2001\\_rpt/hrep107-219.html](http://www.fas.org/irp/congress/2001_rpt/hrep107-219.html) (accessed 20 MAY 11).
- . “Building Language Skills and Cultural Competencies in the Military: Bridging the Gap.” Committee on Armed Services, Subcommittee on Oversight and Investigations. DEC 10.  
[http://armedservices.house.gov/index.cfm/files/serve?File\\_id=2361fa65-7e40-41df-8682-9725d1c377da](http://armedservices.house.gov/index.cfm/files/serve?File_id=2361fa65-7e40-41df-8682-9725d1c377da) (accessed 16 MAY 11)

- . “Decision Eliminating Spanish and Other Language Training for ICE Investigators Was a Mistake.” Homeland Security Committee. Prepared by the Democratic Staff for the Homeland Security Committee, Congressman Bernie G. Thompson, Ranking Member. 28 JUL 05.  
<http://www.hsdl.org/?view&did=455077> (accessed 29 OCT 11).
- U.S. Congress, HR 122, 109<sup>th</sup> Cong., 08 MAR 05.  
<http://www.gpo.gov/fdsys/pkg/BILLS-109hres122ih/pdf/BILLS-109hres122ih.pdf> (accessed 21 MAY 11).
- U.S. Congress, S. 28, 109<sup>th</sup> Cong., 1<sup>st</sup> sess. 01 FEB 05.  
<http://www.gpo.gov/fdsys/pkg/BILLS-109sres28ats/pdf/BILLS-109sres28ats.pdf> (accessed 21 MAY 11).
- U.S. Department of Education, *Enhancing Foreign Language Proficiency in the United States: Preliminary Results of the National Security Language Initiative*. Office of Postsecondary Education. Washington, D.C., 2008.  
<http://www2.ed.gov/about/inits/ed/competitiveness/nsli/nsli-preliminary-results.pdf> (accessed 11 NOV 10).
- U.S. Department of Justice. *The Federal Bureau of Investigation’s Foreign Language Translation Program*. Office of the Inspector General, Audit Division. Audit Report 10–02, OCT 09.  
[http://www.justice.gov/oig/reports/FBI/a1002\\_redacted.pdf](http://www.justice.gov/oig/reports/FBI/a1002_redacted.pdf) (accessed 30 MAY 11).
- U.S. Department of Homeland Security. “Who Became Part of the Department?”  
[http://www.dhs.gov/xabout/history/editorial\\_0133.shtm](http://www.dhs.gov/xabout/history/editorial_0133.shtm) (accessed 28 OCT 11).
- U.S. Immigrations and Customs Enforcement. “Overview.”  
<http://www.ice.gov/about/overview/> (accessed 29 OCT 11).
- . “Detention Management.” <http://www.ice.gov/detention-management/> (accessed 29 OCT 11).
- . “Immigration and Customs Enforcement. Office of Detention and Removal Operations Spanish Language Training Program.”  
[http://www.ice.gov/doclib/about/offices/ero/pdf/spanishlangtraininginfo1\\_2.pdf](http://www.ice.gov/doclib/about/offices/ero/pdf/spanishlangtraininginfo1_2.pdf) (accessed 29 OCT 11).
- . “Working for ICE.”  
<http://www.ice.gov/careers/occupations/work4ice.htm> (accessed 29 OCT 11).
- U.S. Department of State. “Foreign Service Mentors, Re: Languages.”  
<http://careers.state.gov/engage/forums/foreign-service-mentors/foreign-languages> (accessed 27 OCT 11)

- . “Foreign Service Specialist: Selection Criteria.”  
<http://careers.state.gov/specialist/selection-process> (accessed 06 NOV 11).
- . *National Security Language Initiative*. Office of the Spokesman. Briefing by Dina Powell. Washington, D.C. 05 JAN 06.  
<http://merln.ndu.edu/archivepdf/nss/state/58733.pdf> (accessed 09 FEB 11).
- U.S. National Security Strategy. MAY 10.  
[http://www.whitehouse.gov/cites/default/files/rss\\_viewer/national\\_security\\_strategy.pdf](http://www.whitehouse.gov/cites/default/files/rss_viewer/national_security_strategy.pdf) (accessed 09 FEB 11)
- Weitzer, Ronald. “Can the police be reformed?” *Contexts* 4, no. 3(Summer 2005): 21–26. [http://www.gwu.edu/~soc/docs/Weitzer/Can\\_the.pdf](http://www.gwu.edu/~soc/docs/Weitzer/Can_the.pdf) (accessed 15 NOV 11).
- White, Robert. “Aqui se habla Espanol: Officers learn basics of Spanish catered to job.” *U.S. Customs and Border Protection Today* (April 2006).  
[http://www.cbp.gov/xp/CustomsToday/2006/april/officers\\_learn\\_spanish.xml](http://www.cbp.gov/xp/CustomsToday/2006/april/officers_learn_spanish.xml) (accessed 08 NOV 11).



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## APPENDIX – ILR SCALE<sup>367</sup>

**Listening 0+ (Memorized Proficiency)** Sufficient comprehension to understand a number of memorized utterances in areas of immediate needs.

**Listening 1 (Elementary Proficiency)** Sufficient comprehension to understand utterances about basic survival needs and minimum courtesy and travel requirements in areas of immediate need or on very familiar topics, can understand simple questions and answers, simple statements and very simple face-to-face conversations in a standard dialect.

**Listening 2 (Limited Working Proficiency)** Sufficient comprehension to understand conversations on routine social demands and limited job requirements.

**Listening 3 (General Professional Proficiency):** Able to understand the essentials of all speech in a standard dialect including technical discussions within a special field.

**Listening 4 (Advanced Professional Proficiency):** Able to understand all forms and styles of speech pertinent to professional needs.

**Reading 0+ (Memorized Proficiency)** Can recognize all the letters in the printed version of an alphabetic system and high-frequency elements of a syllabary or a character system.

**Reading 1 (Elementary Proficiency)** Sufficient comprehension to read very simple connected written material in a form equivalent to usual printing or typescript.

**Reading 2 (Limited Working Proficiency):** Sufficient comprehension to read simple, authentic written material in a form equivalent to usual printing or typescript on subjects within a familiar context.

**Reading 3 (General Professional Proficiency):** Able to read within a normal range of speed and with almost complete comprehension a variety of authentic prose material on unfamiliar subjects.

**Reading 4 (Advanced Professional Proficiency):** Able to read fluently and accurately all styles and forms of the language pertinent to professional needs.

**Speaking 0+ (Memorized Proficiency)** Able to satisfy immediate needs using rehearsed utterances.

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<sup>367</sup> This table reproduces the first sentence of each definition from the Interagency Language Roundtable website. For more detailed descriptions, see: Interagency Language Roundtable, <http://www.govtilr.org/index.html> (accessed 16 MAY 11).

**Speaking 1 (Elementary Proficiency)** Able to satisfy minimum courtesy requirements and maintain very simple face-to-face conversations on familiar topics.

**Speaking 2 (Limited Working Proficiency)** Able to satisfy routine social demands and limited work requirements.

**Speaking 3 (General Professional Proficiency):** Able to speak the language with sufficient structural accuracy and vocabulary to participate effectively in most formal and informal conversations in practical, social and professional topics.

**Speaking 4 (Advanced Professional Proficiency):** Able to use the language fluently and accurately on all levels normally pertinent to professional needs.

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